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MAGNETICAL, METEOROLOGICAL AND SEISMOGRAPHIC OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORIES,

BOMBAY AND ALIBAG,

IN THE YEAR

1922

UNDER THE DIRECTION OF
S. K. BANERJI, D.Sc.

Printed by Order of His Majesty's Government

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,,	27	,,	,,	October,	30*d* 16*h*	,,	NNW	,,	WNW
,,	31	,,	,,	May,	1*d* Minimum Mag.	,,	81·7	,,	81·7†
,,	33	,,	,,	October,	27*d* Maximum Mag.	,,	89·9	,,	89·0
,,	,,	,,	,,	September,	Heading of column 14	,,	Mean	,,	Mean*
,,	34	,,	,,	November,	3*d* 16*h*	,,	81·3	,,	84·3
,,	50	,,	,,	May,	0*h* Mean	,,	31·4	,,	13·4
,,	,,	,,	,,	,,	Date column	,,	30	,,	30†
,,	,,	,,	,,	,,	,, ,,	,,	31	,,	31†
,,	,,	,,	,,	June,	,, ,,	,,	15	,,	15†
,,	54	,,	,,	February,	1*d* Minimum Mag.	,,	929	,,	922
,,	,,	,,	,,	,,	2*d* ,,	,,	932	,,	937
,,	,,	,,	,,	,,	3*d* ,,	,,	917	,,	919
,,	57	,,	,,	August,	Date column	,,	28	,,	†28
,,	59	,,	,,	November,	Heading of column 14	,,	Mean	,,	Mean*
,,	60	,,	,,	February,	Monthly mean	,,	275	,,	283
,,	61	,,	,,	March,	2*d* Minimum time	,,	0*h* 30*m*	,,	10*h* 30*m*
,,	62	,,	,,	May,	24*d* 2*h*	,,	30	,,	300

INTRODUCTION.

This volume on Bombay Magnetical, Meteorological and Seismographic observations during 1922 is issued in the same form as the volume for 1921. It is the forty-fourth volume of its kind and extends the record of the meteorological and magnetic observations to a period of seventy-seven years and of seismographic observations to a period of twenty-four years. The transference of the magnetic work from Colaba to Alibag in 1904 due to the city of Bombay having decided to have electric tram service, caused a certain amount of discontinuity in the magnetic records, which had run uninterruptedly at Colaba for about sixty years, but as comparative observations could be taken at both the stations for a period of two years before the electric tram service was completed and had commenced its operations, the 'discontinuity' could be calculated and allowed for. The modified form of presenting the values of the principal meteorological and magnetical elements from day to day introduced in the volume for 1921 has been followed in the present volume. The bi-hourly values of the elements represent their momentary values at the end of every two hours of local mean time. It is obvious that a better representation of these elements, when they are rapidly fluctuating, would be obtained from the average values of the elements during every two hours. But the Observatory had all along tabulated the momentary hourly values and this change, however much it may be desired, must be postponed till satisfactory arrangements have been made for the computation of average values.

The Colaba Observatory is situated almost at the extreme south end of the narrow ridge of land extending about three miles to the south-west of the Fort of Bombay and separating the Harbour from the Back Bay. The level of the Observatory compound is about 32 feet above the mean level of the sea.

The co-ordinates giving the position of the Colaba Observatory are—

Astronomical ..	Latitude 18° 53′ 36″ North. Longitude 72° 48′ 56″ East.	Geodetic ..	Latitude 18° 53′ 47″ North. Longitude 72° 48′ 47″ East.

The Alibag Magnetic Observatory is situated on the mainland about 18 miles south-south-east of Bombay and its co-ordinates are—

Astronomical ..	Latitude 18° 38′ 4″ North. Longitude 72° 52′ 35″ East.	Geodetic ..	Latitude 18° 38′ 6″ North. Longitude 72° 52′ 2″ East.

For a general description of the buildings and instruments in both the observatories see "Magnetical, Meteorological and Seismographic Observations made at the Government Observatories, Bombay and Alibag, 1906 to 1910", and also the similar volume for 1916-20.

System of observation at Colaba.

Meteorological observations are taken every day, including Sundays, at the hours 6, 10, 14, 16 and 22 : the day commencing at midnight, Bombay (Colaba), is reckoned from 0 to 24. The time of observation of each element is fixed and the observations are registered with strict punctuality as follows :—

From 5 minutes to the hour to 2 minutes after the hour.	Extent and description of clouds, state of the weather, occasional phenomena, and direction of the wind.
At 2 ,, ,, ,,	Thermograph standard thermometer, dry bulb. do. do. do. wet bulb.
At 3 ,, ,, ,,	Newman's rain-gauge (in wet season).
From 5 to 7 ,, ,, ,,	Thermometer in ground 1 inch deep. do. do. 9 inches deep.
From 7 to 9 ,, ,, ,,	Newman's standard barometer No. 58 and attached thermometer. do. do. do. No. 48 and do.
At 10 ,, ,, ,,	Thermometer attached to barograph.
At 19 ,, ,,	Surface thermometers in the sun 1 and 8 inches deep.

The maximum and minimum thermometers in the thermometer shed, as also the solar radiation thermometer, are read twice daily at 8 and 16 hours.

Observations made once daily include readings of (1) the ground thermometers 20, 60 and 132 inches deep, made at 14 hours, and (2) the nocturnal radiation thermometer made at 8 hours. During the monsoon months Newman's rain-gauge is read daily at midnight and the discharges of the syphon of the self-registering pluviograph are also read once or oftener as required. The electric clock controlling the drop of the time ball and the Harbour clock, is duly regulated thrice every day by comparison with the standard sidereal clock. Government chronometers, belonging to the Royal Indian Marine and Royal Navy Stores at the Observatory and those received from merchant ships in the harbour, are wound daily or twice a week as required and comparisons with the standard clock are made with sufficient frequency to render the instruments always ready for issue at call with well determined rates.

Transit observations of stars for the determination of time for securing the errors and the rates of the sidereal clocks are made every Monday, Wednesday and Friday in the dry months of the year. During the monsoon months no opportunity is lost for observing either the sun or the stars whenever visible. The adjustment of the transit instrument in azimuth is tested frequently by reference to the fixed meridian collimator marks, and level errors are tested and checked once every month. Errors of collimation, level and azimuth are determined once every month except during the monsoon months.

Observations of magnetic declination are made once every month at Colaba about the 15th of each month; the values of declination so obtained are used in comparing the compasses of ships in the harbour.

System of observation at Alibag.

Eye observations of the instruments specified below are taken daily, Sundays included, at 6, 10, 14, 16 and 22 hours at the specified instants of time about the full hour of Greenwich mean time :—

At	19	minutes	to	the	hour	Kew Horizontal Force Magnetometer and attached thermometer.
,,	17	,,	,,	,,	,,	Kew Vertical Force Magnetometer and attached thermometer.
,,	15	,,	,,	,,	,,	Declination Magnetometer and thermometer in the Magnetometer room.
,,	11	,,	,,	,,	,,	Eschenhagen's Vertical Force Variometer and attached thermometer.
,,	10	,,	,,	,,	,,	Watson's Vertical Force Magnetograph and attached thermometer.
,,	9	,,	,,	,,	,,	Watson's Declination Magnetograph.
,,	8	,,	,,	,,	,,	Watson's Horizontal Force Magnetograph and attached thermometer.
,,	7	,,	,,	,,	,,	Eschenhagen's Horizontal Force Variometer and attached thermometer.
,,	6	,,	,,	,,	,,	Thermograph in the Magnetograph room and standard thermometer (read twice daily at 6 and 16 hours only).

Deflection experiments, with vibration magnet of magnetometer No. 137, the moment of which is determined every week, as deflector at a distance of 100 cms. on the horizontal force magnetograph and at a distance of 75 cms. on the vertical force magnetograph, are made once every fortnight. Similar deflection experiments with vibration magnet of Magnetometer No. 3 as deflector are made once a month for the purposes of check work and corresponding deflection experiments at the same distances are also made every month by the same deflector upon a magnet appropriately suspended over the pillar on the ground floor of the magnetometer tower.

Deflection experiments, with vibration magnet No. 137 as deflector at a distance of 100 cms. on the horizontal force variometer, and at a distance of 75 cms. on the vertical force variometer, are also made once a fortnight.

Observations of vibration and deflection for the determination of absolute horizontal force are made with the Observatory standard instrument No. 7 on Wednesdays and with the auxiliary instrument No. 3 with magnets belonging to magnetometer No. 137 on Mondays. With the same instruments observations of absolute declination are taken every Thursday. Observations of inclination are made with the Schulze's Inductor, which is the Observatory standard instrument,

and another inductor by Otto Toepfer every day in the year with the exception of Sundays and holidays; each of the two inductor instruments is ordinarily observed on alternative days, but for check work both the instruments are observed simultaneously on Fridays.

Transit observations of stars for the determination of time are made generally on Tuesdays and Fridays in the dry months; during the monsoon months no opportunity is lost of observing the sun or stars whenever visible. The adjustments of the transit instruments are frequently tested by reference to the fixed collimator marks and by level observations; the residual errors of collimation, level and azimuth are determined once every month except during the monsoon months.

Meteorological Instruments.

1. *Standard Barometer.*—The barometer is by Newman and has been in uninterrupted use since the establishment of the Observatory. It reads on an average 0·004″ below the Kew Standard. The height of the barometer is 37 feet above the mean sea-level.

2. *Barograph.*—The instrument is installed in the underground constant temperature room and the variation of pressure is recorded photographically. The tabulations have been made at 7 minutes after the hour in order that the instant may correspond to the time of eye observation and corrected so as to agree with the Newman's standard barometer.

3. *Standard Dry Bulb and Wet Bulb Thermometers.*—On the 26th November 1917, the freezing points were tested and the zero of the dry bulb standard thermometer No. 401 was found to have changed from 32°·6 to 33°·0 F and that of the wet bulb standard thermometer No. 402 from 32°·5 to 33°·0 F.

4. *Photographic Dry Bulb and Wet Bulb Thermometers.*—The bulbs of these thermometers are placed in the same cage and close to those of the standard dry and wet bulb thermometers. The tabulations of the thermograms have been made at 2 minutes after the hour in order that the instant may correspond to the time of eye observation.

5. *Ground Thermometers.*—These thermometers are installed in the standard thatched shed with their bulbs at the depths of 1, 9, 20, 60 and 132 inches, respectively below the surface. Ground thermometers No. 3426 by Munro and No. 12689 by Casella are placed exposed to the sun in the rain-gauge enclosure with their bulbs at the depths of one inch and eight inches respectively below the surface.

6. *Robinson-Beckley Anemograph.*—This anemograph is of the kind designed by Robinson, with improvements by Robert Beckley. It is erected on the old Time Ball Tower, at a height of 58 feet above the ground, and 100 feet above the mean sea-level. The centres of each pair of opposite hemispherical cups are four feet apart, and the diameter of each of the cups is 9 inches. The diameter of the vanes of the direction recorder is 15 inches and the breadth of the fans 4 inches.

7. *Dines' Anemometer.*—The head-vane has been placed on the old Time Ball Tower at a distance of 6 feet from Robinson-Beckley's cups and 6 inches above their level. The comparison of this instrument with a U-tube pressure gauge, showed on the results of a series of experiments, that the relation between W, the difference in level of the water in inches in the two arms of the U-tube, which is a measure of the pressure of wind, and V, the velocity of wind in miles per hour as indicated in the Colaba Dines' chart, was $W = \cdot00078\ V^2$ instead of $W = \cdot00073\ V^2$ which should have been the correct relation if the instrument was in order and in perfect adjustment. The result showed that the Colaba Dines' instrument recorded only 96 per cent. of the true velocity.

The bi-hourly values of wind velocity tabulated in this volume represent the means of Beckley's readings (corrected by the factor 0·733) and the corresponding Dines' readings. The maximum and minimum values have been obtained from Dines' registrations. The directions of wind have been obtained from Beckley's; the daily mean directions have been derived by converting the hourly directions into N or S and E or W components and combining the mean components.

8. *Rain-gauge.*—Newman's rain-guage, which has been in use since 1845, exposes for the collection of rain drops a circular surface of an average diameter of 12·035 inches, forming the top of the funnel, which opens into a cylindrical vessel below having a diameter of 5·732 inches. Each division of the graduated rod resting on the float represents ·05-inch of rain and the readings of this scale are easily estimated to one-fifth of a division.

9. *Photographic rain-gauge.*—A description of this instrument will be found in the Introduction to the "Bombay Magnetical and Meteorological observations, 1871 to 1878" page xlvi. For methods of reduction of pluviograph records reference is made to the introduction to the "Bombay Magnetical, Meteorological and Seismographic Observations, 1916-20".

Magnetic Instruments.

Variation Instruments.

The horizontal force, vertical force and declination magnetographs in use at Alibag are all by Watson and are mounted on isolated pillars in the magnetograph room. They were maintained in continuous action throughout the year. The variation of temperature in 1922 in the magnetograph room is shown below :—

Monthly and annual range in temperature (Fahrenheit).

	January.	February.	March.	April.	May.	June.	July.	August	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°		°	°	°	°	°
Maximum	83·9	83·9	85·7	89·3	91·0	91·0	88·7	84·9	85·9	88·0	88·0	87·1	91·0
Minimum	82·8	82·5	83·7	85·6	89·2	88·5	84·5	84·0	84·5	85·9	86·7	83·2	82·5

Two Eschenhagen variometers, one for the horizontal force and the other for the vertical force, are also installed in the magnetograph room and are read every day at the hours already mentioned. A set of Kew Horizontal Force Magnetometer, Kew Vertical Force Magnetometer and Declination Magnetometer is installed in the ground-floor room of the magnetometer building and these are read every day at the hours already specified. The magnetograms have been used in deducing the tabulated results except for a few short periods when the record was defective or missing, in which cases the missing hourly values are supplied from eye observations as far as they are available. The tabulations have been made at 51 minutes of every hour instead of at the full hour in order that the instant may coincide with the full hour of Greenwich mean time.

The scale coefficients of the force magnetographs were obtained every fortnight from deflection observations performed on the instruments with deflectors, as already referred to, at a distance of 100 cms. in the case of H and at a distance of 75 cms. in the case of V magnetographs. The value adopted for any month is the mean of the mean observed values for that month and those for the preceding and succeeding months.

The following table gives the scale coefficients for 1 cm. ordinate on the photographic paper of the force magnetographs.

Instrument.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
H. F. Magnetograph	45·1	45·0	44·9	44·7	44·7	44·8	44·9	45·0	45·0	45·0	44·9	45·0
V. F. Magnetograph	95·3	95·3	95·4	95·9	96·1	96·1	95·4	95·3	95·2	95·7	96·1	95·0

$1\ \gamma = \cdot 00001$ c. g. s.

The scale coefficient of the declination magnetograph for 1 cm. of ordinate is $10' \cdot 28$.

The temperature coefficient of the horizontal force magentograph has been determined by heating experiments and its adopted value is ·000036 in C. G. S. units for 1° F. The temperature coefficient of the vertical force magnetograph was found in the same experiments to be practically nil as no appreciable change in force, after allowing for the actual diurnal change, could be definitely ascertained as being due to temperature effects.

Absolute Instruments.

Two magnetometers have been under observation regularly during the period. Magnetometer No. 7 by Cooke and Sons, which is the standard instrument at Alibag, is of the ordinary type of Kew pattern instruments but is modified and improved in several important details. The other

instrument is magnetometer No. 3 by the Cambridge Scientific Instrument Company and is of the usual Kew pattern. Instrument No. 7 is observed on the second floor of the tower of the magnetometer building, while instrument No. 3 is observed on the first floor, each instrument being permanently allowed to stand on its pillar on the respective floors.

The value of the correction, $\log_{10}(1 - \frac{P}{r^2} - \frac{Q}{r^4})$ used in the reduction of the horizontal force observations was obtained for a given month by taking the mean for seven months including the given month as fourth of the seven. The values of this correction for the different months of the year for the standard instrument at 22·5 cms. were as follows :—

January ..	9·99276	February ..	9·99281	March ..	9·99289
April ..	9·99294	May ..	9·99297	June ..	9·99304
July ..	9·99311	August ..	9·99319	September ..	9·99321
October ..	9·99318	November ..	9·99320	December ..	9·99319

Earth Inductor No. 41 by Schulze of Potsdam with Galvanometer No. 200 by Plath are installed on specially constructed pillars in the room on the second floor, while Inductor No. 108 by Otto Toepfer and its galvanometer are installed in the first floor of the magnetometer building.

General.

The south-west monsoon rains commenced at Bombay on the 1st June and ended on the 12th October. The total rainfall during the year amounted to 70·96″ and was only 0·42″ above the normal* of 72 years. The mean temperature of the year was 79°·8 which is 0°·5 above normal. The greatest maximum temperature recorded was 97°·3 on the 8th March and the least minimum was 61°·1 on the 3rd January. The mean temperature of all the months in the year was within 2° of the normal of the season. The mean velocity of wind per hour during the year was 7·1 miles. The greatest daily mean velocity was 14·9 miles per hour on the 19th August and the lowest was 3·5 miles per hour on the 24th April. The greatest mean velocity per hour was 22 miles on the 18th May, while the velocity of a single gust of wind as recorded by the Dine's anemometer reached 36 miles per hour on the 27th July.

The mean and the extreme values of the magnetic elements at Alibag during 1922 are given below along with the corresponding values for the previous year :—

Year.	H						D					V					I
	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean.
		Value	Date.	Value	Date.			Value	Date.	Value	Date.			Value	Date.	Value	Date.		
	γ	γ		γ		γ	′	′		′		′	γ	γ		γ		γ	° ′
1921	36956	37090	13 May	36402	15 May	688	15·9	41·9	15 May	9·5	7 July	32·4	17237	17330	15 May	17154	20 Jany.	176	25 0·3
1922	36967	37058	10 Mar.	36798	14 Sept.	260	12·6	18·0	16 Feby.	6·6	31 Aug.	11·4	17303	17361	12 Aug.	17232	5 April	129	25 5·0

The values of H continued to rise at a gradually increasing rate from the minimum in 1916 till 1921 and at a decreased rate afterwards. Declination diminished during the year at a rate which is very nearly the mean of the last ten years. Both the vertical force and the inclination showed a gradual increase.

The following table gives the character figure assigned to each day according to the international scheme. It will be noticed from the mean character figures that March was, as in 1921, the most active month in the year:—

Month 1922.	"0" days.	"1" days.	"2" days.	Mean character figure.
January	1, 3, 4, 13, 14, 15, 21, 22, 23, 27, 28, 29,	2, 5, 6, 7, 8, 9, 10, 11, 12, 16, 17, 18, 19, 20, 25, 26, 30, 31	24	0·65
February	1, 2, 7, 10, 11, 18, 22, 23, 24, 25	4, 5, 6, 8, 9, 12, 13, 14, 15, 16, 17, 19, 20, 21, 26, 27, 28	3	0·63
March	6, 7, 8, 9, 23, 24, 26, 27	1, 2, 3, 4, 10, 11, 12, 15, 16, 17, 18, 19, 20, 21, 22, 25, 28, 29, 30, 31	5, 13, 14	0·84
April	3, 4, 5, 6, 7, 16, 17, 18, 19, 20	1, 2, 8, 9, 10, 11, 12, 13, 14, 15, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30	0	0·67
May	1, 2, 3, 4, 6, 11, 12, 13, 14, 15, 17, 18, 19, 20, 27, 28, 29, 30, 31	5, 7, 8, 9, 10, 16, 21, 22, 23, 24, 25, 26	0	0·39
June	1, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 21, 22, 24, 25, 26, 27	2, 3, 4, 5, 6, 16, 17, 18, 19, 23, 28, 29, 30	0	0·43

* The values of hourly normals of all the meteorological elements based on all available data up to the year 1920 will shortly be published.

Month 1922.	"0" days.	"1" days.	"2" days.	Mean character figure.
July	4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 20, 21, 22, 23, 25, 31	1, 2, 3, 14, 15, 16, 17, 18, 19, 24, 26, 27, 28, 29, 30	0	0·48
August	1, 2, 3, 4, 6, 7, 8, 16, 17, 18, 19, 20, 22, 28, 30, 31	5, 9, 10, 12, 13, 14, 15, 21, 23, 24, 25, 26, 27, 29	11	0·52
September ..	1, 2, 3, 4, 5, 12, 16, 17, 18, 19, 22, 23, 24, 25, 26, 29, 30	6, 7, 8, 9, 10, 11, 13, 15, 20, 21, 27, 28	14	0·47
October	1, 2, 3, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 26, 27, 28, 29, 30	4, 5, 6, 7, 8, 9, 17, 24, 25, 31	0	0·32
November	4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28	1, 2, 3, 10, 15, 29, 30	0	0·23
December	1, 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31	5, 10, 14, 26	0	0·13

Special observations of both the magnetical and meteorological instruments were taken during the total solar eclipse of September 1922.

Absolute observations and base-line values.

Declination.

Absolute observations of declination were made once a week with both the magnetometers No. 7 and No. 3, one after the other.

Base-line values are derived by converting the ordinates corresponding to absolute observations with instrument No. 7 into angles and substracting the converted ordinates from the observed absolute *easterly* declination. The values so obtained of the base-lines of the declination magnetograph denote *westerly* declination.

The adopted values are derived by taking overlapping means of 5 successive observations and reducing them to the proper epoch, values for intermediate days being obtained by simple interpolation.

Declination base-line values, 1922.

(0° plus tabular minutes.)

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	′	′		′	′		′	′
January 5 ..	7·5	7·6	May 11 ..	7·1	7·1	September 7 ..	6·1	6·1
,, 12 ..	7·5	7·5	,, 18 ..	7·3	7·1	,, 14 ..	6·2	6·2
,, 19 ..	7·2	7·4	,, 25 ..	6·9	7·0	,, 21 ..	6·4	6·4
,, 26 ..	7·6	7·3	June 1 ..	6·9	7·0	,, 28 ..	6·4	6·5
February 2 ..	7·1	7·3	,, 8 ..	6·9	7·0	October 5 ..	6·7	6·7
,, 9 ..	7·2	7·3	,, 15 ..	7·1	7·0	,, 12 ..	7·0	6·8
,, 16 ..	7·2	7·2	,, 22 ..	7·1	7·0	,, 19 ..	7·1	6·9
,, 23 ..	7·4	7·3	,, 29 ..	7·0	7·0	,, 26 ..	6·9	6·9
March 2 ..	7·2	7·3	July 6 ..	7·0	6·9	November 2 ..	6·9	6·9
,, 9 ..	7·3	7·4	,, 13 ..	6·6	6·8	,, 9 ..	6·7	6·9
,, 16 ..	7·6	7·5	,, 20 ..	7·0	6·7	,, 16 ..	7·0	6·9
,, 23 ..	7·6	7·5	,, 27 ..	6·4	6·5	,, 23 ..	6·8	6·9
,, 30 ..	7·8	7·5	August 3 ..	6·4	6·4	,, 30 ..	6·9	6·8
April 7 ..	7·3	7·6	,, 10 ..	6·0	6·1	December 7 ..	6·9	6·7
,, 13 ..	7·3	7·6	,, 17 ..	6·1	6·0	,, 14 ..	6·5	6·6
,, 20 ..	7·7	7·6	,, 24 ..	5·9	6·0	,, 21 ..	6·4	6·5
,, 27 ..	6·9	6·9*	,, 31 ..	5·8	6·0	,, 28 ..	6·5	6·4
May 4 ..	7·1	7·1						

Horizontal Force.

Absolute observations of horizontal intensity were made twice a week, on Mondays with instrument No. 3 and on Wednesdays with instrument No. 7. A day's observations comprise a double set of vibration and deflection observations at three distances (22·5 cms., 30 cms. and 40 cms.). In calculating the base-line values the mean of observed values at the two nearer distances has been adopted.

Base-line values are derived by converting the mean ordinates corresponding to absolute observations with instrument No. 7 in C.G.S. unit (unity = γ) and substracting the converted ordinates from the mean observed absolute horizontal force. They are further reduced to a uniform temperature of 85° F. to make the series comparable from month to month and year to year.

The adopted values are derived by taking overlapping means of 5 successive double sets of observations and reducing them to the proper epoch, values for intermediate days being obtained by simple interpolation.

* A shift in the D base-line of 0′·7 occurred on the 27th April.

Horizontal force base-line values at 85° F., 1922.

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	γ	γ		γ	γ		γ	γ
January 4	36726	36730	May 17	36749	36744	September 19	36721	36714
,, 11	737	729	,, 25	739	742	,, 21	721	714
,, 18	727	729	,, 31	749	743	,, 23	687	715
February 1	727	731	June 7	741	741	,, 27	720	718
,, 8	730	731	,, 14	740	741	October 4	728	720
,, 15	736	732	,, 21	739	736	,, 11	734	728
,, 22	737	734	,, 28	735	732	,, 18	731	729
March 1	729	733	July 5	725	730	,, 25	729	730
,, 8	739	733	,, 12	719	726	November 1	727	727
,, 15	725	732	,, 19	729	722	,, 8	729	726
,, 22	735	733	,, 26	719	721	,, 15	723	725
,, 29	731	732	August 2	719	720	,, 22	724	725
April 5	737	735	,, 9	720	719	,, 29	726	723
,, 12	735	734	,, 16	714	722	December 6	722	722
,, 20	737	738	,, 23	726	722	,, 13	719	721
,, 26	733	737	,, 30	729	722	,, 20	721	722
May 3	749	740	September 6	719	723	,, 27	717	723
,, 10	735	741	,, 13	721	720			

Vertical Force.

Dip observations were made every day in the year, with the exception of Sundays and holidays, each of the two inductor instruments being observed on alternate days.

Base-line values are derived by converting the mean ordinates corresponding to inclination observation in C.G.S. unit (unity=1 γ) and substracting the converted ordinate from the absolute vertical force derived from the inclination observation. Values derived from Inductor No. 108 are reduced to those detived from Inductor No. 41 (which is the Observatory Standard) by applying the mean correction for the month deduced from the comparative observations taken once a week.

The adopted values are derived by taking overlapping means of 7 successive observations and reducing them to the proper epoch, values for those days not given by this operation being obtained by interpolation.

Vertical force base-line values, 1922.

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	γ	γ		γ	γ		γ	γ
January 4	16651	16667	May 17	16597	16588	September 18	16573	16579
,, 11	682	684	,, 26	585*	588	,, 20	580	580
,, 18	662	667	,, 31	609	596	,, 22	565	580
February 1	663	662	June 7	566	587	,, 27	587	592
,, 8	660	653	,, 14	601	583	October 4	614	593
,, 15	679	689	,, 21	600	589	,, 11	581	570
,, 22	689	692	,, 28	628	608	,, 18	573	558
March 1	667	674	July 5	612	616	,, 25	554	558
,, 8	671	651	,, 12	650	641	November 1	586	560
,, 15	656	655	,, 19	637	636	,, 8	607	600
,, 22	679	672	,, 26	656	638	,, 15	606	596
,, 29	649	653	August 2	681	665	,, 22	579	577
April 5	675	648	,, 9	684	659	,, 29	596	576
,, 12	643	646	,, 16	631	623	December 6	548	556
,, 19	663	652	,, 23	625	616	,, 13	584	570
,, 26	621	626	,, 30	631	616	,, 20	598	576
May 3	623	608	September 6	612	604	,, 27	577	575
,, 10	595	592	,, 13	590	591			

Seismographs.

An Omori-Ewing Seismograph (E-W component) and a locally constructed seismograph (N-S and E-W components) were kept in continuous operation. The earthquakes recorded by the Omori instrument will be found tabulated on page 67.

Magnetic Storms.

In plates, I, II, III, IV and V are reproduced disturbed magnetic records for days recommended for publication by the International Commission of Terrestrial Magnetism. The base line values and scale co-efficients are shown with each curve. The hourly breaks last for 2 to 3 minutes and the time shown against a break is the time for the middle of the break expressed in Greenwich mean time. Increasing ordinates for H. F. and V. F. curves mean increase in force and for the declination curves increase in angle towards the east.

Colaba Observatory:
the 8th June 1925.

S. K. BANERJI,
Meteorologist, Bombay.

* From inductor No. 108 and reduced to inductor No. 41 by the constant difference for the month.

JANUARY. (IN INCHES OF MERCURY AT 32° F).

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean:*
1	29·913	29·901	29·908	29·957	29·990	29·995	29·969	29·925	29·909	29·933	29·969	29·975	29·945
2	·955	·940	·931	·951	·989	30·002	·964	·912	·893	·915	·947	·967	·947
3	·965	·942	·940	·953	·990	29·998	·946	·884	·878	·894	·933	·942	·938
4	·936	·928	·920	·944	·982	·990	·944	·886	·860	·874	·904	·925	·924
5	·892	·878	·870	·913	·956	·979	·930	·872	·858	·884	·920	·926	·907
6	·909	·894	·882	·900	·950	·976	·924	·873	·856	·890	·930	·941	·910
7	·918	·914	·898	·910	·951	·966	·922	·876	·854	·880	·931	·943	·914
8	·925	·916	·906	·945	·996	30·018	·972	·917	·924	·964	30·004	30·010	·959
9	·993	·971	·959	·991	30·041	·043	·988	·922	·907	·931	29·981	29·991	·976
10	·969	·942	·933	·955	·003	·021	·977	·923	·892	·913	·947	·953	·952
11	·939	·918	·908	·936	29·984	·008	·964	·904	·902	·923	·952	·957	·942
12	·945	·919	·923	·940	·990	29·991	·945	·896	·891	·909	·967	·983	·942
13	·964	·935	·930	·946	·984	·998	·948	·892	·872	·893	·930	·944	·935
14	·928	·904	·897	·911	·861	·975	·913	·859	·847	·861	·895	·914	·905
15	·904	·886	·867	·891	·941	·960	·900	·854	·844	·852	·876	·890	·888
16	·878	·852	·842	·858	·905	·918	·876	·848	·825	·844	·888	·890	·869
17	·865	·849	·843	·861	·900	·911	·861	·821	·825	·849	·885	·895	·865
18	·883	·856	·856	·872	·912	·928	·892	·848	·840	·862	·884	·892	·877
19	·871	·839	·827	·840	·893	·889	·841	·784	·797	·825	·879	·876	·845
20	·860	·830	·824	·853	·910	·918	·878	·828	·825	·842	·874	·886	·860
21	·862	·852	·856	·900	·958	·982	·940	·886	·876	·902	·944	·968	·912
22	·949	·939	·933	·949	·993	30·013	·963	·901	·905	·929	·957	·971	·950
23	·954	·928	·916	·942	·980	29·994	·950	·895	·885	·906	·946	·954	·938
24	·941	·921	·909	·929	·981	·994	·944	·897	·892	·919	·963	·977	·930
25	·968	·942	·927	·942	·982	30·000	·940	·882	·890	·900	·922	·943	·926
26	·936	·908	·894	·912	·958	29·969	·923	·886	·892	·898	·929	·950	·921
27	·940	·921	·897	·919	·970	·989	·949	·897	·904	·921	·956	·983	·937
28	·971	·959	·939	·965	30·008	30·021	·987	·939	·932	·945	·953	·973	·965
29	·959	·945	·939	·969	·019	·034	·979	·924	·911	·921	·933	·947	·957
30	·929	·903	·889	·917	29·943	29·955	·915	·874	·874	·895	·901	·907	·908
31	·906	·889	·882	·919	·969	·996	·956	·904	·904	·918	·930	·932	·927
Mean ..	29·927	29·907	29·898	29·922	29·967	29·982	29·935	29·884	29·876	29·897	29·930	29·942	29·922

Highest hourly value during January .. 30·053
Lowest do. do. .. 29·781

FEBRUARY.

1	29·918	29·902	29·894	29·916	29·956	29·964	29·934	29·896	29·898	29·920	29·970	29·958	29·928
2	·949	·929	·933	·955	·985	·993	·955	·899	·905	·915	·955	·961	·945
3	·964	·940	·940	·972	30·020	30·040	30·000	·914	·926	·946	·978	·994	·973
4	·971	·945	·947	·975	·027	·041	29·977	·907	·903	·923	·963	·967	·961
5	·946	·926	·928	·964	·006	·030	·984	·918	·916	·930	·964	·976	·957
6	·952	·914	·906	·938	29·972	29·990	·950	·890	·880	·902	·944	·956	·932
7	·931	·901	·887	·911	·951	·967	·921	·871	·835	·843	·873	·893	·897
8	·876	·860	·844	·868	·922	·946	·904	·858	·840	·854	·898	·920	·883
9	·890	·884	·888	·900	·928	·952	·916	·868	·848	·860	·888	·918	·895
10	·905	·885	·877	·899	·941	·959	·921	·869	·839	·849	·885	·911	·895
11	·878	·860	·848	·872	·912	·924	·880	·826	·810	·816	·852	·876	·862
12	·851	·825	·825	·849	·897	·927	·877	·823	·801	·819	·849	·877	·851
13	·864	·844	·830	·856	·906	·938	·912	·854	·828	·846	·888	·906	·873
14	·878	·862	·844	·882	·940	·962	·928	·862	·856	·888	·936	·958	·900
15	·948	·926	·920	·938	·966	·968	·916	·866	·856	·874	·912	·932	·918
16	·911	·873	·851	·881	·913	·905	·861	·807	·791	·813	·861	·873	·860
17	·855	·829	·813	·837	·883	·887	·847	·795	·779	·815	·861	·879	·841
18	·884	·866	·868	·912	·960	30·002	·960	·910	·894	·902	·926	·928	·920
19	·936	·920	·926	·952	·980	29·984	·926	·870	·846	·858	·906	·908	·917
20	·881	·837	·825	·843	·873	·885	·845	·783	·765	·779	·817	·835	·830
21	·814	·790	·782	·818	·872	·892	·850	·792	·788	·822	·860	·868	·831
22	·844	·822	·816	·836	·882	·898	·852	·818	·820	·848	·898	·928	·857
23	·904	·878	·872	·906	·962	·984	·936	·872	·862	·866	·904	·928	·906
24	·914	·890	·878	·908	·934	·950	·890	·836	·812	·824	·860	·878	·880
25	·868	·844	·838	·870	·898	·908	·870	·814	·788	·806	·842	·866	·851
26	·865	·849	·845	·883	·915	·937	·901	·851	·825	·853	·921	·929	·882
27	·904	·864	·860	·902	·938	·956	·910	·850	·822	·842	·876	·892	·885
28	·889	·865	·865	·893	·943	·947	·897	·835	·811	·829	·859	·889	·876
Mean ..	29·900	29·876	29·870	29·898	29·939	29·955	29·911	29·856	29·841	29·859	29·898	29·915	29·893

Highest hourly value during February .. 30·041
Lowest do. do. .. 29·765

*Derived from 24 hourly values.

BI-HOURLY VALUES OF BAROMETRIC PRESSURE, 1922.

MARCH. (IN INCHES OF MERCURY AT 32° F.).

Date.	Hours.												Mean.*
	0	2	4	6	8	10	12	14	16	18	20	22	
1	29·874	29·838	29·828	29·860	29·914	29·928	29·872	29·807	29·778	29·792	29·844	29·876	29·851
2	·864	·846	·824	·852	·892	·901	·876	·831	·822	·846	·892	·910	·864
3	·900	·872	·860	·888	·946	·980	·952	·899	·889	·904	·946	·961	·919
4	·955	·921	·911	·937	·971	·993	·953	·905	·881	·885	·901	·915	·926
5	·912	·880	·876	·911	·952	·976	·940	·874	·850	·870	·900	·911	·903
6	·895	·871	·867	·897	·947	·965	·911	·841	·819	·843	·873	·895	·884
7	·882	·855	·851	·885	·929	·943	·893	·833	·814	·828	·867	·886	·873
8	·870	·841	·842	·893	·947	·963	·913	·853	·839	·867	·895	·923	·888
9	·898	·872	·872	·906	·952	·966	·919	·864	·838	·856	·902	·918	·897
10	·903	·871	·865	·895	·943	·955	·911	·853	·835	·855	·903	·919	·893
11	·910	·881	·885	·916	·962	·968	·932	·876	·842	·874	·918	·936	·909
12	·921	·885	·878	·925	·971	·977	·931	·873	·835	·847	·893	·919	·905
13	·902	·858	·840	·884	·930	·946	·904	·844	·812	·815	·858	·892	·874
14	·882	·844	·834	·872	·910	·919	·880	·810	·766	·784	·836	·864	·850
15	·854	·820	·820	·854	·894	·914	·888	·840	·812	·838	·888	·915	·863
16	·902	·874	·872	·892	·933	·946	·894	·840	·812	·836	·882	·904	·884
17	·893	·862	·858	·885	·941	·951	·915	·851	·827	·843	·883	·893	·885
18	·878	·844	·826	·860	·888	·894	·856	·806	·785	·802	·829	·852	·842
19	·844	·820	·824	·854	·892	·892	·852	·790	·764	·782	·826	·846	·832
20	·821	·791	·791	·825	·865	·875	·835	·785	·779	·809	·829	·857	·822
21	·836	·810	·802	·838	·876	·889	·834	·784	·768	·790	·822	·844	·824
22	·824	·785	·798	·844	·892	·895	·845	·793	·784	·797	·841	·876	·832
23	·851	·823	·821	·850	·897	·889	·835	·781	·754	·768	·823	·840	·828
24	·832	·794	·791	·804	·854	·864	·796	·734	·724	·749	·804	·828	·799
25	·817	·784	·761	·782	·829	·830	·778	·735	·728	·767	·814	·853	·791
26	·843	·813	·804	·824	·861	·872	·838	·789	·776	·808	·846	·876	·830
27	·853	·825	·809	·829	·879	·893	·866	·815	·801	·828	·868	·899	·848
28	·874	·842	·834	·852	·894	·905	·889	·842	·832	·856	·892	·902	·870
29	·878	·833	·841	·853	·894	·896	·864	·822	·813	·838	·880	·904	·860
30	·885	·858	·841	·861	·897	·908	·877	·820	·793	·809	·846	·856	·854
31	·844	·809	·801	·829	·873	·883	·852	·803	·789	·807	·829	·852	·830
Mean ..	29·874	29·843	29·836	29·866	29·910	29·922	29·881	29·826	29·805	29·826	29·865	29·888	29·862

Highest hourly value during March .. 29·993
Lowest do. do. .. 29·719

APRIL.

1	29·834	29·818	29·816	29·848	29·892	29·896	29·858	29·805	29·785	29·794	29·824	29·858	29·836
2	·849	·824	·806	·844	·887	·889	·854	·800	·784	·788	·813	·836	·831
3	·813	·782	·771	·793	·857	·871	·840	·785	·760	·761	·785	·795	·801
4	·783	·739	·753	·788	·841	·851	·817	·755	·723	·742	·779	·809	·783
5	·810	·786	·782	·814	·852	·850	·804	·742	·728	·755	·800	·822	·796
6	·827	·799	·785	·815	·858	·869	·830	·791	·769	·790	·848	·870	·822
7	·851	·836	·836	·870	·917	·934	·906	·836	·811	·808	·843	·864	·860
8	·853	·833	·826	·861	·901	·901	·870	·803	·769	·769	·807	·846	·835
9	·815	·793	·782	·828	·880	·893	·855	·799	·763	·783	·821	·841	·821
10	·825	·802	·814	·840	·888	·922	·899	·828	·798	·810	·834	·858	·843
11	·837	·801	·801	·829	·885	·895	·859	·795	·766	·761	·794	·809	·820
12	·804	·773	·799	·845	·881	·889	·851	·795	·754	·761	·800	·830	·816
13	·833	·805	·803	·828	·847	·853	·821	·765	·747	·799	·835	·837	·814
14	·835	·795	·781	·815	·855	·859	·837	·783	·751	·761	·797	·817	·806
15	·796	·744	·730	·750	·804	·818	·784	·736	·702	·720	·754	·760	·757
16	·734	·712	·704	·726	·776	·772	·734	·682	·654	·664	·718	·758	·720
17	·743	·733	·737	·761	·787	·793	·750	·701	·677	·692	·735	·761	·740
18	·759	·745	·749	·765	·801	·791	·751	·701	·677	·685	·724	·743	·740
19	·739	·722	·713	·737	·773	·769	·718	·655	·632	·651	·686	·715	·709
20	·704	·683	·684	·726	·767	·781	·749	·701	·668	·685	·729	·749	·720
21	·729	·696	·701	·723	·772	·778	·744	·683	·652	·674	·736	·766	·722
22	·759	·729	·714	·738	·777	·783	·739	·695	·672	·696	·746	·780	·735
23	·768	·731	·745	·774	·816	·824	·798	·747	·723	·774	·784	·809	·774
24	·775	·732	·740	·785	·808	·805	·778	·736	·718	·751	·800	·792	·768
25	·765	·730	·732	·770	·820	·834	·820	·760	·739	·809	·819	·832	·786
26	·776	·748	·757	·796	·850	·870	·852	·806	·786	·801	·841	·853	·813
27	·837	·798	·796	·828	·886	·887	·877	·816	·784	·803	·842	·880	·836
28	·835	·793	·793	·827	·863	·871	·843	·801	·773	·797	·841	·865	·825
29	·844	·816	·806	·833	·873	·875	·852	·802	·764	·780	·816	·827	·823
30	·798	·766	·770	·791	·831	·827	·805	·756	·736	·745	·777	·813	·784
Mean ..	29·798	29·769	29·768	29·798	29·841	29·848	29·816	29·762	29·735	29·754	29·791	29·813	29·791

Highest hourly value during April .. 29·934
Lowest do. do. .. 29·632

*Derived from 24 hourly values.

MAY. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*
1	29·790	29·765	29·768	29·794	29·828	29·830	29·802	29·758	29·740	29·746	29·769	29·807	29·783
2	·789	·763	·770	·812	·864	·864	·845	·786	·767	·774	·802	·824	·807
3	·818	·794	·795	·833	·868	·878	·855	·799	·775	·795	·828	·852	·824
4	·832	·809	·803	·841	·867	·882	·876	·830	·805	·818	·849	·869	·841
5	·864	·839	·827	·846	·889	·911	·893	·852	·835	·858	·883	·901	·867
6	·861	·845	·840	·881	.914	·919	·901	·854	·838	·847	·877	·894	·872
7	·875	·849	·840	·865	·891	·894	·865	·827	·798	·818	·846	·864	·852
8	·840	·802	·796	·823	·856	·860	·830	·781	·754	·782	·810	·832	·813
9	·802	·763	·763	·782	·830	·842	·819	·768	·730	·742	·772	·797	·784
10	·796	·768	·770	·791	·860	·871	·836	·799	·783	·791	·815	·823	·809
11	·797	·787	·782	·799	·845	·857	·827	·783	·747	·755	·777	·793	·796
12	·773	·757	·747	·781	·817	·809	·771	·713	·685	·691	·709	·731	·748
13	·723	·713	·731	·749	·787	·785	·759	·685	·632	·663	·733	·737	·726
14	·720	·729	·739	·760	·816	·824	·792	·749	·714	·734	·746	·764	·758
15	·746	·731	·731	·756	·803	·813	·787	·741	·706	·717	·749	·762	·753
16	·739	·709	·712	·743	·770	·766	·736	·692	·638	·644	·697	·693	·710
17	·672	·627	·646	·679	·722	·728	·707	·654	·621	·634	·679	·700	·678
18	·699	·687	·685	·719	·754	·757	·731	·684	·645	·710	·811	·768	·721
19	·747	·746	·737	·765	·828	·830	·788	·748	·712	·724	·836	·781	·770
20	·774	·735	·741	·766	·785	·790	·765	·720	·679	·706	·747	·773	·747
21	·731	·707	·704	·728	·766	·778	·751	·716	·686	·710	·744	·735	·730
22	·722	·716	·728	·746	·779	·787	·760	·707	·675	·688	·718	·745	·730
23	·722	·697	·699	·729	·749	·762	·738	·684	·636	·669	·705	·722	·710
24	·705	·677	·676	·704	·730	·742	·721	·670	·646	·663	·696	·696	·693
25	·672	·648	·642	·677	·713	·721	·707	·672	·649	·666	·695	·717	·682
26	·708	·683	·683	·715	·776	·794	·778	·731	·704	·710	·740	·767	·733
27	·747	·725	·722	·749	·785	·788	·766	·727	·686	·708	·743	·770	·743
28	·761	·734	·733	·757	·781	·806	·769	·717	·684	·700	·749	·791	·747
29	·766	·748	·747	·771	·795	·817	·791	·741	·708	·729	·769	·790	·765
30	·775	·742	·744	·770	·797	·810	·798	·760	·742	·751	·770	·783	·771
31	·784	·753	·754	·777	·810	·816	·788	·751	·713	·725	·760	·782	·764
Mean ..	29·766	29·743	29·744	29·771	29·809	29·817	29·792	29·745	29·714	29·731	29·769	29·783	29·765

Highest hourly value during May .. 29·923
Lowest do. do. .. 29·621

JUNE.

1	29·760	29·714	29·695	29·712	29·728	29·733	29·708	29·684	29·673	29·678	29·718	29·732	29·710
2	·721	·702	·711	·727	·746	·769	·747	·726	·715	·731	·755	·779	·737
3	·770	·735	·732	·770	·809	·826	·809	·767	·741	·744	·786	·822	·776
4	·786	·742	·742	·772	·802	·790	·760	·728	·696	·716	·736	·760	·751
5	·737	·696	·699	·725	·740	·749	·733	·695	·679	·688	·720	·741	·716
6	·725	·701	·702	·729	·753	·769	·736	·709	·682	·693	·718	·740	·721
7	·730	·692	·689	·720	·751	·760	·738	·699	·666	·683	·713	·731	·714
8	·717	·673	·670	·700	·736	·750	·723	·686	·655	·665	·707	·720	·699
9	·703	·665	·657	·687	·720	·721	·709	·669	·647	·657	·687	·715	·686
10	·693	·667	·647	·676	·708	·714	·690	·665	·619	·626	·656	·678	·669
11	·660	·632	·625	·641	·672	·664	·658	·629	·599	·615	·633	·655	·639
12	·645	·619	·618	·639	·673	·680	·655	·611	·595	·625	·664	·666	·641
13	·653	·620	·611	·616	·645	·661	·639	·599	·566	·585	·630	·636	·622
14	·617	·577	·580	·612	·645	·629	·606	·571	·557	·588	·611	·642	·604
15	·615	·583	·583	·596	·632	·649	·627	·588	·573	·603	·635	·650	·612
16	·631	·621	·625	·657	·699	·709	·697	·663	·644	·654	·669	·700	·664
17	·689	·661	·653	·691	·722	·731	·711	·682	·659	·677	·704	·720	·691
18	·713	·685	·685	·705	·736	·751	·735	·715	·683	·682	·710	·726	·711
19	·717	·683	·683	·700	·719	·716	·701	·673	·646	·662	·678	·687	·687
20	·664	·628	·615	·642	·664	·682	·654	·629	·617	·621	·654	·669	·645
21	·630	·601	·596	·624	·648	·663	·640	·615	·585	·610	·648	·667	·627
22	·638	·602	·606	·626	·650	·681	·656	·640	·617	·632	·665	·685	·641
23	·650	·606	·593	·610	·628	·630	·609	·577	·544	·538	·578	·600	·595
24	·578	·546	·528	·562	·584	·590	·569	·539	·498	·512	·556	·569	·553
25	·554	·519	·512	·540	·587	·613	·596	·546	·493	·500	·527	·548	·544
26	·522	·473	·478	·514	·536	·553	·535	·510	·494	·503	·536	·567	·519
27	·563	·536	·548	·573	·619	·630	·612	·581	·543	·561	·597	·633	·584
28	·617	·581	·570	·586	·610	·612	·604	·572	·545	·560	·588	·616	·588
29	·595	·571	·566	·585	·609	·613	·581	·568	·547	·549	·593	·615	·583
30	·597	·567	·563	·593	·623	·625	·610	·591	·563	·577	·615	·623	·595
Mean ..	29·663	29·630	29·626	29·651	29·680	29·689	29·668	29·638	29·611	29·625	29·656	29·676	29·651

Highest hourly value during June .. 29·826
Lowest do. do. .. 29·463

*Derived from 24 hourly values.

JULY. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*
1	29·605	29·574	29·581	29·599	29·631	29·636	29·623	29·617	29·577	29·605	29·651	29·674	29·615
2	·669	·647	·643	·675	·723	·740	·720	·701	·671	·694	·747	·759	·700
3	·747	·718	·709	·733	·772	·791	·772	·756	·734	·755	·794	·803	·758
4	·773	·746	·740	·753	·760	·769	·755	·727	·700	·729	·757	·770	·748
5	·729	·697	·685	·708	·732	·733	·709	·679	·648	·658	·684	·682	·693
6	·646	·632	·624	·644	·668	·685	·670	·634	·611	·610	·639	·655	·644
7	·638	·611	·605	·622	·646	·655	·642	·610	·572	·582	·601	·622	·615
8	·606	·558	·559	·602	·630	·651	·642	·619	·591	·601	·639	·656	·614
9	·647	·602	·597	·620	·650	·667	·662	·636	·608	·624	·658	·683	·638
10	·674	·652	·640	·664	·698	·708	·701	·666	·655	·650	·676	·684	·673
11	·678	·642	·623	·642	·664	·668	·655	·633	·609	·613	·640	·656	·643
12	·642	·603	·582	·608	·630	·631	·611	·589	·558	·574	·608	·634	·605
13	·611	·570	·558	·587	·618	·618	·596	·567	·549	·556	·578	·601	·583
14	·583	·551	·553	·577	·611	·627	·619	·598	·578	·589	·638	·656	·600
15	·632	·602	·602	·638	·670	·688	·673	·664	·646	·660	·673	·680	·652
16	·666	·649	·644	·658	·668	·668	·652	·643	·624	·642	·682	·692	·657
17	·663	·646	·634	·643	·669	·671	·671	·637	·620	·637	·652	·677	·652
18	·655	·629	·625	·641	·671	·663	·659	·617	·599	·611	·647	·677	·640
19	·657	·635	·617	·631	·664	·683	·669	·645	·625	·639	·677	·703	·653
20	·679	·654	·650	·662	·694	·718	·696	·656	·632	·649	·673	·687	·670
21	·658	·615	·597	·614	·636	·645	·626	·584	·555	·571	·588	·613	·606
22	·571	·534	·535	·568	·600	·606	·582	·545	·519	·544	·573	·588	·564
23	·586	·567	·557	·587	·617	·658	·667	·630	·592	·612	·654	·682	·619
24	·657	·620	·629	·648	·679	·698	·697	·680	·671	·682	·717	·737	·679
25	·713	·686	·685	·711	·731	·745	·729	·705	·681	·696	·726	·747	·713
26	·724	·677	·668	·706	·742	·753	·739	·708	·682	·679	·700	·715	·706
27	·694	·654	·651	·673	·701	·705	·685	·663	·637	·653	·674	·693	·673
28	·678	·650	·652	·660	·700	·698	·677	·653	·634	·656	·667	·692	·668
29	·673	·642	·630	·660	·674	·680	·674	·636	·626	·644	·670	·684	·658
30	·657	·638	·627	·644	·675	·687	·675	·638	·624	·635	·670	·688	·655
31	·667	·635	·630	·678	·697	·708	·686	·650	·636	·658	·682	·701	·669
Mean ..	29·661	29·630	29·624	29·647	29·675	29·686	29·672	29·645	29·621	29·636	29·666	29·684	29·654

Highest hourly value during July .. 29·803
Lowest do. do. .. 29·519

AUGUST.

1	29·676	29·648	29·634	29·656	29·671	29·672	29·648	29·619	29·600	29·610	29·641	29·668	29·645
2	·627	·591	·586	·610	·646	·658	·643	·624	·611	·634	·670	·687	·633
3	·678	·651	·646	·674	·704	·720	·714	·688	·678	·688	·710	·721	·689
4	·707	·679	·676	·696	·719	·735	·712	·683	·652	·663	·681	·700	·691
5	·671	·629	·631	·654	·676	·687	·669	·631	·620	·638	·659	·674	·653
6	·657	·641	·635	·659	·681	·703	·706	·683	·681	·697	·726	·744	·687
7	·733	·697	·707	·724	·757	·767	·769	·735	·711	·725	·755	·771	·737
8	·759	·727	·731	·739	·767	·775	·761	·731	·717	·720	·749	·751	·743
9	·729	·695	·686	·692	·735	·747	·737	·701	·684	·703	·729	·746	·715
10	·725	·693	·689	·715	·751	·773	·761	·732	·725	·739	·769	·781	·738
11	·766	·750	·742	·759	·786	·808	·791	·764	·760	·760	·789	·807	·775
12	·782	·738	·746	·762	·789	·795	·786	·764	·754	·764	·774	·793	·771
13	·770	·738	·738	·756	·786	·786	·769	·747	·731	·746	·762	·776	·758
14	·755	·726	·720	·740	·784	·788	·776	·745	·724	·736	·758	·756	·751
15	·738	·712	·716	·740	·764	·773	·746	·711	·700	·704	·728	·735	·731
16	·697	·674	·677	·693	·722	·728	·706	·677	·651	·666	·693	·698	·689
17	·662	·640	·621	·643	·675	·695	·678	·644	·626	·643	·673	·676	·656
18	·653	·628	·619	·638	·680	·693	·679	·644	·621	·641	·675	·687	·655
19	·654	·618	·613	·625	·647	·672	·658	·632	·604	·626	·649	·664	·639
20	·643	·618	·609	·633	·675	·689	·683	·641	·622	·639	·667	·685	·651
21	·663	·632	·641	·660	·702	·717	·700	·664	·650	·667	·700	·727	·679
22	·715	·691	·691	·707	·749	·767	·751	·711	·701	·711	·739	·763	·726
23	·753	·711	·701	·727	·761	·783	·757	·711	·709	·719	·747	·767	·738
24	·749	·715	·711	·728	·750	·766	·754	·710	·684	·694	·722	·730	·725
25	·725	·687	·677	·697	·733	·750	·739	·710	·689	·714	·754	·771	·721
26	·756	·729	·725	·741	·774	·792	·785	·743	·722	·727	·758	·787	·753
27	·754	·723	·703	·719	·749	·755	·732	·691	·660	·676	·697	·719	·715
28	·702	·659	·657	·679	·711	·717	·699	·662	·646	·671	·714	·729	·687
29	·712	·682	·678	·699	·740	·756	·726	·683	·672	·700	·727	·743	·711
30	·726	·690	·678	·709	·740	·751	·736	·703	·676	·700	·732	·760	·717
31	·738	·711	·701	·722	·748	·759	·736	·703	·688	·711	·747	·771	·728
Mean ..	29·712	29·681	29·677	29·697	29·728	29·741	29·726	29·693	29·676	29·691	29·719	29·735	29·707

Highest hourly value during August .. 29·818
Lowest do. do. .. 29·584

*Derived from 24 hourly values.

SEPTEMBER. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.												* Mean.
	0	2	4	6	8	10	12	14	16	18	20	22	
1	29·749	29·726	29·727	29·746	29·787	29·799	29·781	29·755	29·743	29·767	29·792	29·797	29·765
2	·778	·752	·738	·762	·802	·808	·782	·736	·718	·740	·765	·762	·761
3	·736	·702	·710	·726	·768	·788	·762	·730	·706	·710	·736	·748	·736
4	·727	·693	·687	·709	·745	·753	·743	·705	·696	·715	·731	·757	·723
5	·743	·718	·702	·720	·754	·778	·764	·723	·698	·726	·750	·774	·738
6	·766	·738	·728	·726	·761	·785	·776	·736	·721	·735	·770	·781	·751
7	·762	·722	·720	·734	·760	·764	·751	·711	·686	·704	·745	·766	·735
8	·746	·718	·699	·721	·760	·761	·739	·696	·678	·690	·730	·749	·724
9	·733	·712	·698	·727	·770	·778	·751	·707	·679	·699	·742	·751	·729
10	·733	·697	·691	·717	·751	·770	·741	·695	·667	·689	·716	·731	·716
11	·719	·694	·694	·711	·734	·747	·717	·663	·657	·676	·711	·727	·705
12	·717	·689	·693	·716	·748	·757	·737	·695	·683	·710	·746	·759	·722
13	·743	·733	·733	·757	·784	·793	·767	·725	·719	·733	·755	·779	·753
14	·758	·728	·718	·725	·742	·757	·724	·684	·674	·690	·716	·726	·720
15	·710	·673	·668	·679	·709	·724	·693	·647	·635	·666	·707	·721	·686
16	·709	·671	·664	·692	·724	·738	·708	·651	·632	·658	·696	·712	·688
17	·688	·656	·654	·686	·724	·726	·698	·646	·630	·658	·700	·716	**·681**
18	·693	·660	·668	·694	·734	·730	·710	·674	·650	·688	·718	·738	·696
19	·717	·684	·684	·716	·756	·762	·738	·698	·674	·698	·732	·758	·717
20	·740	·706	·701	·729	·763	·775	·748	·700	·677	·703	·740	·759	·729
21	·743	·715	·708	·732	·762	·782	·752	·700	·678	·691	·742	·752	·730
22	·742	·713	·721	·733	·774	·786	·757	·730	·722	·751	·786	·811	·753
23	·796	·770	·770	·796	·835	·856	·826	·786	·776	·800	·822	·846	·807
24	·838	·816	·824	·856	·902	·904	·878	·840	·824	·844	·876	·892	·859
25	·882	·859	·854	·881	·934	·936	·898	·859	·849	·860	·888	·894	·883
26	·875	·856	·851	·878	·919	·925	·883	·837	·823	·835	·859	·875	·867
27	·854	·826	·828	·856	·892	·906	·874	·826	·820	·841	·869	·884	·856
28	·853	·838	·842	·872	·918	·916	·884	·840	·826	·850	·884	·909	·871
29	·894	·874	·886	·909	·944	·950	·912	·856	·844	·856	·892	·891	**·892**
30	·874	·847	·840	·868	·903	·901	·856	·802	·782	·806	·835	·844	·846
Mean ..	29·767	29·740	29·737	29·759	29·795	29·805	29·778	29·735	29·719	29·740	29·772	29·787	29·761

Highest hourly value during September.. 29·952
Lowest do. do. .. 29·630

OCTOBER.

1	29·824	29·798	29·798	29·823	29·852	29·854	29·812	29·758	29·735	29·763	29·794	29·806	29·800
2	·789	·759	·759	·795	·831	·843	·788	·731	·714	·745	·801	·819	**·783**
3	·809	·783	·781	·817	·852	·859	·815	·753	·743	·777	·813	·821	·802
4	·813	·803	·803	·826	·869	·882	·837	·785	·765	·783	·819	·843	·819
5	·828	·803	·806	·834	·880	·886	·846	·790	·772	·782	·830	·836	·824
6	·824	·792	·800	·836	·876	·885	·846	·776	·756	·778	·820	·832	·818
7	·824	·806	·810	·850	·886	·888	·852	·814	·800	·824	·870	·858	·841
8	·847	·823	·819	·845	·875	·877	·833	·777	·767	·797	·841	·857	·829
9	·835	·824	·819	·843	·897	·919	·869	·827	·810	·861	·907	·928	·865
10	·925	·892	·891	·928	·973	·985	·944	·889	·873	·933	·944	·996	·934
11	·981	·916	·906	·951	·981	·985	·934	·881	·878	·903	·942	·958	**·935**
12	·959	·888	·890	·927	·958	·971	·930	·890	·874	·894	·930	·926	·918
13	·903	·877	·892	·915	·958	·967	·915	·866	·864	·876	·913	·914	·905
14	·899	·881	·893	·932	·967	·964	·913	·869	·846	·861	·899	·905	·902
15	·898	·865	·875	·902	·934	·941	·883	·831	·800	·833	·865	·864	·873
16	·829	·802	·820	·854	·896	·899	·846	·786	·765	·805	·852	·859	·834
17	·828	·808	·814	·857	·889	·896	·839	·796	·780	·810	·858	·858	·837
18	·849	·813	·809	·847	·909	·907	·857	·791	·767	·785	·823	·843	·833
19	·828	·789	·800	·840	·883	·878	·821	·761	·747	·763	·813	·825	·812
20	·789	·767	·773	·797	·845	·857	·804	·759	·751	·785	·819	·833	·799
21	·819	·810	·812	·843	·886	·890	·835	·781	·769	·795	·819	·837	·825
22	·838	·817	·828	·847	·907	·920	·868	·828	·806	·826	·872	·890	·855
23	·881	·863	·854	·888	·925	·925	·877	·835	·825	·842	·887	·911	·877
24	·890	·871	·872	·887	·925	·933	·873	·821	·810	·844	·892	·896	·877
25	·881	·849	·863	·899	·929	·929	·886	·839	·822	·849	·892	·898	·879
26	·876	·866	·856	·903	·947	·958	·894	·848	·847	·854	·895	·894	·887
27	·885	·870	·872	·902	·935	·936	·876	·828	·824	·832	·864	·874	·874
28	·854	·839	·839	·869	·903	·914	·858	·809	·792	·807	·844	·851	·847
29	·830	·805	·811	·849	·887	·901	·846	·798	·776	·803	·857	·867	·836
30	·835	·810	·814	·856	·908	·910	·860	·809	·805	·842	·894	·886	·853
31	·873	·838	·840	·890	·922	·924	·866	·813	·813	·864	·905	·903	·870
Mean ..	29·856	29·830	29·833	29·866	29·906	29·912	29·862	29·811	29·797	29·823	29·864	29·874	29·853

Highest hourly value during October.. 30·012
Lowest do. do. .. 29·714

*Derived from 24 hourly values.

NOVEMBER. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.												* Mean.
	0	2	4	6	8	10	12	14	16	18	20	22	
1	29·887	29·844	29·852	29·872	29·908	29·914	29·866	29·808	29·793	29·816	29·861	29·871	29·858
2	·842	·823	·816	·848	·869	·885	·839	·791	·792	·816	·863	·861	·837
3	·842	·826	·837	·866	·904	·903	·847	·791	·776	·784	·823	·829	·836
4	·824	·821	·827	·862	·901	·906	·854	·802	·790	·813	·842	·842	·840
5	·822	·807	·811	·832	·864	·868	·816	·771	·773	·799	·847	·847	·821
6	·823	·798	·797	·825	·868	·872	·816	·769	·757	·779	·812	·825	·812
7	·803	·769	·762	·787	·818	·828	·780	·737	·737	·767	·811	·823	·784
8	·796	·764	·757	·792	·832	·841	·798	·745	·737	·761	·812	·824	·789
9	·785	·753	·749	·775	·825	·832	·778	·729	·725	·758	·801	·785	**·774**
10	·774	·754	·747	·789	·828	·832	·781	·724	·721	·752	·798	·788	·774
11	·764	·742	·754	·782	·829	·847	·800	·744	·738	·763	·788	·797	·779
12	·780	·765	·770	·811	·852	·860	·809	·765	·765	·797	·842	·849	·807
13	·830	·809	·825	·855	·905	·914	·863	·826	·831	·860	·901	·903	·862
14	·879	·850	·857	·889	·934	·944	·891	·838	·835	·875	·917	·932	·888
15	·919	·906	·906	·942	·993	30·002	·945	·899	·893	·920	·964	·980	·940
16	·959	·926	·924	·953	30·008	·012	·952	·898	·892	·931	·958	·972	·949
17	·957	·927	·920	·949	29·983	29·982	·937	·887	·875	·905	·947	·957	·934
18	·935	·912	·918	·948	·995	·997	·953	·904	·892	·934	·967	·982	·945
19	·972	·950	·953	·985	30·031	30·038	·997	·942	·935	·959	·996	30·005	**·980**
20	·992	·966	·962	·988	30·029	·033	·976	·913	·898	·922	·945	29·953	·963
21	·932	·900	·904	·925	29·965	29·965	·901	·840	·842	·867	·907	·913	·904
22	·888	·869	·875	·914	·951	·948	·883	·830	·839	·871	·908	·910	·890
23	·878	·863	·866	·893	·923	·919	·865	·823	·821	·854	·881	·880	·872
24	·863	·832	·831	·862	·898	·902	·846	·804	·782	·812	·853	·861	·845
25	·842	·813	·825	·853	·888	·894	·848	·790	·784	·826	·876	·871	·843
26	·856	·856	·854	·888	·933	·936	·909	·849	·838	·874	·919	·924	·887
27	·905	·884	·883	·915	·971	·982	·924	·863	·851	·886	·930	·939	·912
28	·924	·893	·883	·917	·958	·964	·913	·858	·856	·896	·936	·939	·911
29	·912	·887	·887	·924	·964	·965	·916	·863	·853	·890	·918	·927	·909
30	·908	·885	·889	·926	·972	·979	·907	·842	·832	·868	·912	·906	·902
Mean ..	29·870	29·846	29·848	29·879	29·920	29·925	29·874	29·821	29·815	29·845	29·885	29·890	29·868

Highest hourly value during November .. 30·049
Lowest do. do. .. 29·711

DECEMBER.

1	29·885	29·862	29·865	29·901	29·948	29·950	29·896	29·831	29·820	29·854	29·878	29·892	29·882
2	·874	·868	·869	·899	·942	·940	·886	·823	·817	·840	·874	·892	·877
	·877	·863	·859	·879	·920	·921	·882	·823	·818	·837	·875	·893	**·870**
4	·870	·844	·851	·882	·928	·941	·900	·863	·865	·904	·960	·976	·900
5	·955	·938	·939	·967	30·006	30·007	·945	·888	·867	·897	·936	·958	·941
6	·936	·903	·899	·910	29·944	29·960	·901	·849	·841	·869	·916	·925	·904
7	·910	·891	·899	·920	·967	·977	·917	·852	·839	·854	·900	·906	·902
8	·891	·872	·871	·897	·954	·958	·904	·850	·843	·874	·904	·922	·895
9	·905	·891	·890	·921	·961	·963	·921	·879	·881	·911	·945	·956	·919
10	·929	·904	·905	·951	·994	·994	·938	·902	·902	·933	·965	·958	·941
11	·920	·900	·902	·938	·963	·983	·923	·867	·867	·883	·909	·910	·913
12	·892	·867	·860	·891	·932	·925	·870	·824	·835	·865	·892	·893	·879
13	·884	·959	·868	·895	·938	·946	·907	·865	·869	·908	·950	·954	·910
14	·937	·919	·905	·954	30·004	30·021	·980	·916	·920	·937	·976	30·000	·957
15	·984	·954	·942	·969	·017	·020	·958	·897	·887	·910	·950	29·962	·954
16	·936	·913	·905	·943	29·990	29·998	·957	·897	·898	·941	·980	·994	·947
17	·971	·930	·921	·947	·986	30·000	·952	·885	·887	·914	·948	·966	·942
18	·961	·935	·919	·945	·999	·013	·959	·899	·893	·919	·956	·965	·948
19	·956	·941	·936	·972	30·026	·044	·992	·941	·937	·970	30·020	30·027	·982
20	30·015	·994	·998	30·021	·069	·077	30·021	·963	·950	·982	·018	30·020	30·011
21	29·996	·965	·974	·009	·040	·051	29·997	·937	·929	·958	29·985	29·990	29·985
22	·972	·950	·942	29·980	·028	·029	·988	·937	·929	·956	·987	30·000	·975
23	·984	·961	·959	29·981	·031	·059	30·017	·968	·970	30·001	30·038	·045	30·002
24	30·022	30·012	30·010	30·031	·075	·083	·038	·984	·982	·003	·044	·058	·029
25	·041	·023	·024	·053	·101	·111	·055	·996	·979	·010	·036	·053	·040
26	·033	·022	·014	·047	·100	·110	·065	30·002	·996	·021	·059	·066	·045
27	·058	·035	·018	·036	·082	·102	·052	29·995	·996	·028	·070	·084	**·046**
28	·064	·042	·036	·056	·104	·116	·060	·988	·970	29·994	·042	·053	·043
29	·027	29·995	29·975	·009	·049	·065	·008	·955	·935	·957	29·991	·011	29·997
30	29·993	·977	·977	29·996	·037	·053	·004	·954	·940	·967	30·015	·035	·995
31	30·010	·986	·984	30·013	·065	·078	·030	·962	·943	·964	·003	·027	30·006
Mean ..	29·958	29·939	29·933	29·962	30·006	30·016	29·965	29·909	29·903	29·931	29·968	29·980	29·956

Highest hourly value during December.. 30·118
Lowest do. do. .. 29·810

*Derived from 24 hourly values.

* ROYAL

JUNE. (FROM PLUVIOGRAPH RECORDS.)

Date.	Hours. 0–2	2–4	4–6	6–8	8–10	10–12	12–14	14–16	16–18	18–20	20–22	22–24	Daily total.	Maximum fall in one hour.	Time of occurrence. h. to h.		Daily total by Newman.
1	..	..	..	..	..	..	..	..	..	..	0·02	0·45	0·47	0·45	23	24	0·48
2	0·73	1·38	0·60	0·53	..	..	..	0·07	..	..	..	..	3·31	1·00	3	4	3·31
3	..	..	..	..	0·15	..	..	..	..	..	..	..	0·15	0·08	8	9	0·15
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	0·02	..	..	..	0·04	..	..	..	..	..	0·06	0·04	13	14	0·07
10	..	..	0·01	..	..	..	..	..	..	..	..	..	0·01	0·01	5	6	0·01
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	0·63	..	..	..	..	..	..	..	..	..	..	..	0·63	0·63	0	1	0·63
13	0·01	0·02	0·01	..	..	..	..	..	..	..	..	..	0·04	0·01	1	2	0·04
14	..	..	0·08	..	0·02	..	..	..	..	..	..	..	0·10	0·08	5	6	0·12
15	0·02	0·03	0·02	0·37	0·15	0·01	..	0·01	0·07	0·62	0·03	..	1·33	0·47	18	19	1·35
16	..	..	0·78	1·08	0·11	..	0·01	..	..	..	..	..	1·98	0·95	7	8	2·04
17	..	..	..	..	..	..	..	..	..	0·03	..	..	0·03	0·03	18	19	0·03
18	..	..	..	..	..	..	..	..	..	0·04	..	..	0·04	0·04	19	20	0·04
19	..	..	..	..	..	..	..	..	..	..	0·05	0·12	0·17	0·12	22	23	0·17
20	..	..	0·02	0·03	1·43	0·44	0·39	0·28	0·78	0·19	0·28	0·11	3·95	0·96	9	10	4·06
21	..	0·06	0·02	0·05	0·01	..	..	0·32	0·50	0·03	0·08	0·23	1·30	0·29	14	15	1·33
22	0·03	0·01	..	0·20	0·11	0·02	0·07	0·04	0·01	0·01	0·07	..	0·57	0·18	7	8	0·59
23	..	..	0·14	..	..	..	0·04	0·10	..	..	0·26	0·88	1·42	0·65	22	23	1·45
24	0·09	0·01	..	0·27	0·04	0·03	..	..	..	..	0·04	0·02	0·50	0·26	7	8	0·50
25	0·08	0·03	0·03	1·40	3·49	0·16	0·07	0·06	0·01	0·01	0·08	0·45	**5·87**	**2·17**	8	9	**6·00**
26	0·78	1·10	1·01	0·57	0·13	0·04	0·10	0·03	0·03	0·01	..	..	3·80	0·83	2	3	3·85
27	..	..	..	..	..	..	..	0·01	0·08	..	..	..	0·09	0·08	17	18	0·10
28	..	..	..	..	0·01	..	..	0·10	..	..	..	..	0·11	0·10	15	16	0·06
29	..	..	..	..	..	..	..	0·01	0·07	..	..	..	0·08	0·07	16	17	0·07
30	0·03	..	..	0·01	..	0·01	..	0·02	0·11	..	..	..	0·18	0·11	17	18	0·18
Total ..	2·40	2·64	2·74	4·51	5·65	0·71	0·72	1·05	1·66	0·94	0·91	2·26	26·19	..	..		26·63

JULY.

															h.	to h.	
1	..	..	..	0·02	..	..	0·10	0·15	..	..	0·01	..	0·28	0·15	14	15	0·30
2	..	0·06	..	..	0·16	..	0·31	0·79	0·02	..	..	..	1·34	0·52	15	16	1·36
3	0·02	0·01	0·13	0·11	..	..	0·22	0·15	0·05	0·05	..	..	0·74	0·22	13	14	0·74
4	..	0·21	0·49	0·14	..	..	..	0·22	0·60	0·65	0·65	0·08	3·04	0·59	18	19	3·03
5	0·16	0·37	0·01	0·05	0·05	..	0·02	0·02	0·01	0·06	0·36	0·22	1·33	0·21	2	3	1·37
6	0·02	0·22	0·13	0·12	0·02	0·05	0·45	0·06	..	0·02	..	..	1·09	0·32	13	14	1·12
7	..	..	..	..	..	..	..	..	0·03	0·12	0·04	..	0·19	0·11	19	20	0·17
8	0·31	..	0·02	0·20	..	..	0·01	..	..	0·02	0·03	..	0·59	0·20	1	2	0·62
9	0·03	..	..	..	..	..	..	..	..	..	..	0·06	0·09	0·06	23	24	0·08
10	0·11	0·01	..	..	..	..	0·01	..	..	..	..	..	0·13	0·09	0	1	0·13
11	..	..	..	..	..	..	0·20	..	..	..	..	..	0·20	0·20	12	13	0·22
12	..	..	..	0·36	0·02	0·01	..	..	..	..	0·02	..	0·21	0·11	6	7	0·22
13	..	..	0·06	0·01	0·01	0·29	..	..	..	..	..	..	0·37	0·29	11	12	0·39
14	..	..	0·11	0·32	0·07	0·01	..	..	0·07	0·11	0·01	..	0·70	0·27	7	8	0·68
15	0·04	..	0·01	0·21	..	0·02	..	0·01	0·08	..	..	..	0·39	0·17	6	7	0·42
16	0·18	..	0·01	0·04	..	..	..	..	0·04	0·09	..	..	0·36	0·18	0	1	0·37
17	0·04	..	..	..	..	0·03	..	0·08	..	..	0·03	..	0·18	0·06	14	15	0·19
18	..	0·25	..	..	0·01	..	..	..	0·03	..	0·06	0·03	0·38	0·25	3	4	0·38
19	0·14	..	0·06	0·01	0·77	1·06	0·82	0·25	0·01	..	0·08	0·95	4·15	0·96	11	12	4·24
20	0·14	0·03	0·02	..	0·02	0·07	..	..	0·08	..	..	0·11	0·47	0·11	0	1	0·38
21	0·04	0·21	0·26	0·53	0·33	0·38	0·62	0·09	0·10	0·80	1·15	1·96	**6·47**	**1·04**	23	24	**6·56**
22	1·28	0·35	0·71	0·70	0·72	0·24	0·02	0·06	0·01	..	..	..	4·09	0·66	0	1	3·99
23	..	0·02	0·12	0·03	0·55	1·15	0·22	0·05	..	0·02	0·03	0·03	2·22	0·80	10	11	2·18
24	..	0·04	0·07	..	0·11	..	..	0·06	0·04	..	0·04	0·05	0·41	0·10	9	10	0·44
25	0·05	0·01	..	0·07	0·04	..	0·03	..	0·12	0·03	0·05	0·05	0·45	0·11	17	18	0·45
26	..	..	0·08	..	0·03	0·01	0·01	..	..	0·01	0·01	0·06	0·21	0·08	5	6	0·22
27	0·03	0·03	0·15	0·06	0·03	..	0·01	0·02	0·02	0·02	0·01	0·05	0·43	0·11	5	6	0·44
28	..	0·01	0·10	0·01	..	..	..	0·01	0·02	0·01	..	..	0·16	0·09	4	5	0·17
29	..	0·01	..	..	0·01	0·02	0·01	0·01	0·02	..	..	..	0·08	0·02	11	12	0·08
30	..	..	0·01	..	0·05	..	..	..	..	..	..	..	0·06	0·05	8	9	0·06
31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	2·59	1·84	2·55	2·79	3·00	3·36	3·06	2·03	1·35	2·01	2·58	3·65	30·81	..	..		31·00

AUGUST. (FROM PLUVIOGRAPH RECORDS.)

Date.	Hours.												Daily total.	Maximum fall in one hour.	Time of occurrence.		Daily total by Newman
	0–2	2–4	4–6	6–8	8–10	10–12	12–14	14–16	16–18	18–20	20–22	22–24			h.	to h.	
1	..	0·02	..	..	0·03	..	..	0·13	..	..	0·02	..	0·20	0·12	14	15	0·22
2	..	..	0·01	0·01	0·01	..	..	0·12	..	0·02	0·01	..	0·18	0·11	14	15	0·19
3	0·24	..	0·04	..	..	..	0·01	0·09	0·01	..	0·06	0·01	0·46	0·24	0	1	0·45
4	..	..	0·01	..	..	0·01	..	..	..	..	0·01	..	0·03	0·01	5	6	0·05
5	..	..	0·01	0·09	0·01	..	..	..	..	..	0·03	..	0·14	0·09	6	7	0·15
6	..	0·02	..	0·01	..	..	..	..	..	..	..	..	0·03	0·02	3	4	0·03
7	..	..	0·04	..	..	..	0·01	..	..	..	..	..	0·05	0·02	4	5	0·05
8	..	..	..	..	..	..	..	..	..	..	..	0·02	0·02	0·02	22	23	0·03
9	0·06	..	..	..	0·01	0·04	..	..	..	..	..	..	0·11	0·06	1	2	0·12
10	..	..	0·01	0·11	0·02	0·09	..	..	..	..	..	0·01	0·24	0·10	6	7	0·24
11	..	..	..	..	0·01	..	..	0·02	0·01	..	..	0·11	0·15	0·11	23	24	0·14
12	0·01	..	0·06	..	..	..	..	..	..	..	0·01	..	0·08	0·03	4	5	0·10
13	..	..	..	0·08	..	..	..	..	..	..	..	..	0·08	0·08	7	8	0·08
14	..	0·01	..	..	..	..	..	..	..	..	0·04	..	0·05	0·04	20	21	0·05
15	..	..	0·18	0·01	0·01	..	..	..	..	..	..	..	0·20	0·17	4	5	0·20
16	..	..	..	..	0·01	..	..	..	..	..	..	..	0·01	0·01	9	10	0·02
17	..	0·04	0·01	0·01	..	0·07	0·06	..	..	..	..	..	0·19	0·06	10	11	0·19
18	0·01	0·09	..	0·01	0·06	0·11	..	..	..	..	..	0·05	0·33	0·11	11	12	0·33
19	0·02	..	0·01	..	..	..	..	..	0·01	0·04	0·02	0·01	0·11	0·04	19	20	0·12
20	..	..	0·03	0·03	0·04	..	..	..	..	..	..	..	0·10	0·03	5	6	0·11
21	..	..	0·04	..	0·17	0·03	..	0·01	..	..	..	0·16	0·41	0·17	8	9	0·41
22	0·11	0·20	0·31	..	0·24	..	0·09	..	0·01	..	..	0·13	1·09	0·30	4	5	1·11
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	0·02	..	..	..	0·04	..	..	..	..	..	..	0·03	0·09	0·03	9	10	0·09
25	..	..	0·01	..	..	0·02	..	..	..	..	0·01	..	0·04	0·02	11	12	0·04
26	..	..	0·04	0·02	0·02	..	..	..	..	..	..	..	0·08	0·02	4	5	0·06
27	0·04	..	0·06	..	0·04	..	0·20	..	..	..	..	..	0·34	0·20	12	13	0·35
28	..	..	0·03	0·03	0·06	..	..	..	..	..	..	..	0·12	0·06	8	9	0·13
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	0·01	..	..	..	..	..	..	..	..	..	..	0·01	0·01	3	4	0·01
31	..	0·01	..	..	..	0·01	..	..	..	..	0·03	0·04	0·09	0·04	22	23	0·08
Total ..	0·51	0·40	0·90	0·41	0·78	0·38	0·37	0·37	0·04	0·06	0·24	0·57	5·03	..	..		5·15

SEPTEMBER.

															h.	to h.	
1	..	0·05	..	0·04	0·02	..	..	..	..	..	..	..	0·11	0·05	3	4	0·11
2	..	0·04	..	..	..	..	..	..	..	..	..	..	0·04	0·04	3	4	0·04
3	..	..	..	..	0·01	0·20	0·22	0·01	0·07	0·16	0·02	0·01	0·70	0·20	11	12	0·71
4	0·01	..	..	0·01	..	..	..	..	..	0·02	..	..	0·04	0·02	18	19	0·06
5	0·02	..	0·02	0·03	..	..	..	0·06	..	0·02	0·01	..	0·16	0·06	14	15	0·15
6	..	..	..	..	0·02	..	0·12	..	..	..	0·06	0·04	0·24	0·10	12	13	0·20
7	..	..	..	0·05	..	..	..	..	..	..	..	..	0·05	0·05	7	8	0·11
8	..	..	..	..	0·09	0·71	..	..	..	..	..	0·21	1·01	0·65	11	12	1·04
9	0·14	0·05	0·04	..	0·02	..	..	..	..	..	..	..	0·25	0·07	0	1	0·25
10	..	..	..	0·01	0·17	..	..	..	..	..	..	..	0·18	0·16	8	9	0·18
11	..	0·04	0·05	0·08	..	0·02	..	..	..	..	..	..	0·19	0·07	6	7	0·21
12	..	..	..	0·09	0·01	..	..	..	..	..	..	0·02	0·12	0·07	7	8	0·12
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	..	0·10	0·07	0·02	0·25	0·16	0·01	..	..	..	0·61	0·19	12	13	0·64
16	..	..	..	..	0·06	0·36	0·02	..	..	0·12	..	0·05	0·61	0·28	10	11	0·62
17	0·03	0·01	..	..	0·01	..	..	..	0·04	..	..	..	0·09	0·03	0	1	0·10
18	..	..	..	..	..	0·03	..	..	0·07	0·20	0·01	..	0·31	0·19	18	19	0·29
19	0·01	0·01	0·02	0·01	..	..	..	..	..	..	..	0·01	0·06	0·02	5	6	0·06
20	0·26	0·12	0·34	0·30	..	0·01	..	..	..	..	..	0·20	1·23	0·34	5	6	1·25
21	0·20	..	..	..	..	..	..	..	..	..	..	0·14	0·34	0·20	0	1	0·36
22	0·21	0·04	0·07	0·09	0·03	..	..	0·01	..	..	..	..	0·45	0·21	0	1	0·47
23	..	..	..	..	..	0·03	0·08	..	..	..	..	..	0·11	0·08	13	14	0·11
24	..	0·05	0·08	..	..	..	..	..	..	..	..	..	0·13	0·08	4	5	0·12
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	0·07	0·01	..	..	..	..	..	..	0·08	0·07	9	10	0·08
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	0·17	..	..	..	..	..	..	..	..	..	..	..	0·17	0·17	1	2	0·15
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total..	1·05	0·41	0·62	0·81	0·58	1·39	0·69	0·24	0·19	0·52	0·10	0·68	7·28	..	..		7·43

BI-HOURLY TOTALS OF RAINFALL (IN INCHES), 1922.

OCTOBER. (FROM PLUVIOGRAPH RECORDS).

Date.	Hours.												Daily total.	Maximum fall in one hour.	Time of occurrence.	Daily total by Newman.
	0–2	2–4	4–6	6–8	8–10	10–12	12–14	14–16	16–18	18–20	20–22	22–24			h. to h.	
10	..	..	..	..	..	..	..	..	..	0·17	..	..	0·17	**0·17**	19 20	0·17
11	0·09	..	..	0·08	0·16	..	..	..	..	..	..	0·07	0·40	0·13	8 9	0·41
12	0·03	..	..	..	..	..	..	..	..	..	..	..	0·03	0·03	0 1	0·03
No rainfall occurred during the days of this month not mentioned in this table.																

There was a fall of 0·13″ of rain on the 23rd December between 8^h and 10^h

The months of January to May and November were dry.

Total fall of rain in the year was 70·04″ by Pluviograph and 70·96″ by Newman.

Total number of rainy days in the year was 81 according to Pluviograph and 84 according to Newman. (A rainy day is assumed to be that on which a tenth of an inch or upwards has fallen.)

The greatest daily fall of rain in the year, that of the 21st July, was 6·47″ by Pluviograph and 6·56″ by Newman.

JANUARY. (IN MILES PER HOUR).

Date.	Hours.												Mean.*	Maximum.		Minimum.		
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.		Mag.
														H. M.		H. M.		
1	5	5	4	5	8	11	12	12	15	13	15	9	9·5	16 24	23	6	41	0
2	9	7	7	7	4	6	8	9	11	13	15	8	8·9	20 24	22	9	35	1
3	7	7	6	4	4	5	6	8	14	15	9	6	7·7	18 6	21	11	58	1
4	4	7	8	7	10	9	9	2	6	9	8	7	7·1	9 18	15	23	54	0
5	2	4	5	5	4	1	2	5	5	3	1	5	3·9	2 38	9	0	5	0
6	3	4	7	6	7	3	3	5	8	6	0	2	4·3	15 35	11	6	54	0
7	2	3	7	3	4	3	5	7	7	6	3	2	4·1	14 45	13	1	43	0
8	2	2	3	5	7	2	6	9	10	11	9	7	6·0	19 2	17	0	9	0
9	3	7	4	5	5	6	9	12	15	16	12	5	8·2	19 22	25	6	59	1
10	6	4	6	6	5	4	5	10	11	12	10	6	7·3	15 24	20	11	35	1
11	4	5	4	7	10	7	5	7	12	12	9	7	7·7	17 48	19	13	30	1
12	3	4	8	9	9	4	1	6	7	10	6	4	6·3	19 8	15	12	7	0
13	1	3	3	5	7	5	4	6	7	9	11	5	5·7	21 29	15	4	55	0
14	3	4	5	3	4	2	7	9	12	10	10	5	6·1	16 50	16	6	54	0
15	3	3	3	1	4	2	6	7	11	12	13	7	6·0	20 12	19	0	53	0
16	4	4	4	4	5	5	1	6	5	6	7	5	4·7	19 29	10	7	5	0
17	3	4	2	7	4	4	2	7	8	5	3	2	4·1	16 11	11	11	59	0
18	2	1	3	4	4	7	8	7	6	5	5	3	4·4	11 33	15	0	0	0
19	4	4	5	5	2	4	7	8	10	11	9	4	6·3	18 58	15	8	30	0
20	4	5	6	4	3	7	9	11	9	9	4	2	6·1	13 34	16	8	34	0
21	3	5	5	3	7	11	8	10	10	11	11	5	7·5	9 46	18	0	15	0
22	7	4	7	7	7	5	7	9	10	12	11	6	7·9	17 7	21	10	59	1
23	4	5	5	5	8	7	5	7	9	11	11	7	6·8	18 58	17	13	31	1
24	3	4	4	4	6	6	4	7	7	9	8	9	6·0	19 23	14	12	14	1
25	5	3	4	4	5	4	4	7	10	9	7	3	5·4	17 3	17	12	0	1
26	3	5	3	3	3	4	4	7	7	7	5	3	4·7	17 29	12	3	54	0
27	3	3	4	4	3	2	7	8	11	10	3	4	5·4	17 33	17	10	42	0
28	3	3	1	3	5	7	7	9	11	9	8	4	5·9	17 20	16	2	10	1
29	7	6	7	7	7	8	12	13	12	12	15	7	9·3	20 27	24	9	10	1
30	7	6	6	7	3	4	7	9	11	10	8	4	6·5	16 49	16	9	5	0
31	7	8	7	3	3	5	5	7	10	11	9	1	6·2	16 14	17	23	53	0
Mean ..	4·1	4·5	4·9	4·9	5·4	5·2	6·0	7·9	9·6	9·8	8·2	5·0	6·3					

FEBRUARY.

1	1	1	5	9	7	6	5	7	6	3	7	6	5·5	5 55	12	1	57	0
2	3	5	5	1	5	3	7	10	9	5	4	4	5·1	15 11	18	6	3	0
3	9	11	7	4	5	8	10	10	11	11	11	7	8·7	19 21	19	9	7	0
4	7	7	6	6	6	8	7	12	13	13	14	7	8·7	18 11	23	12	22	1
5	4	4	6	7	10	7	3	7	11	12	10	5	7·2	16 14	17	12	40	1
6	3	5	7	9	10	7	5	5	7	7	7	5	6·5	5 35	16	14	48	0
7	4	7	5	7	7	7	3	7	7	9	9	4	6·3	19 28	15	13	15	1
8	1	5	7	9	9	4	4	7	7	7	4	4	5·7	7 9	13	0	45	0
9	3	4	6	3	3	3	10	15	15	12	9	3	7·5	15 41	25	1	6	0
10	4	6	5	3	3	1	7	9	10	11	7	3	5·7	17 33	17	9	5	0
11	3	4	5	3	5	5	3	9	7	3	1	4	4·3	14 56	11	11	52	0
12	4	3	3	5	5	2	5	7	7	5	2	3	4·1	15 29	11	2	5	0
13	4	3	2	3	3	3	7	7	6	6	1	1	3·9	14 40	11	4	6	0
14	1	0	5	3	2	1	5	9	10	10	7	2	4·6	17 20	15	0	0	0
15	5	7	6	5	5	7	10	15	15	15	12	5	8·9	17 10	24	9	40	0
16	12	13	11	6	8	7	11	13	12	12	8	7	9·8	14 15	22	9	58	1
17	10	11	11	2	8	7	8	10	10	10	3	1	7·3	3 33	16	21	50	0
18	5	4	4	7	4	5	9	10	7	5	6	7	6·1	13 14	16	8	10	1
19	10	8	5	4	5	2	7	12	15	15	9	5	8·5	15 39	23	10	34	0
20	8	7	3	2	3	1	9	10	11	11	5	3	6·1	17 38	18	4	44	0
21	3	8	8	4	3	5	9	9	11	14	10	4	7·5	18 7	22	9	55	1
22	5	5	3	4	5	4	7	10	11	10	7	5	6·1	16 14	19	21	26	0
23	4	5	4	1	3	7	7	8	10	9	2	3	5·4	17 44	16	9	0	0
24	11	9	7	8	10	9	11	13	13	12	7	11	10·1	14 11	21	9	50	0
25	12	12	9	5	10	6	9	11	11	11	10	5	8·9	1 35	19	6	29	0
26	11	10	11	5	6	7	10	11	10	8	5	3	7·6	15 24	17	23	20	0
27	1	3	1	1	2	4	6	5	7	7	7	4	4·1	16 44	11	0	0	0
28	5	5	4	7	1	2	7	10	11	13	10	4	6·7	17 25	21	8	43	0
Mean ..	5·5	6·2	5·7	4·7	5·5	4·9	7·2	9·6	10·0	9·5	6·9	4·5	6·7					

*Derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

MARCH. (IN MILES PER HOUR.)

Date.	Hours.												Mean.*	Maximum.		Minimum.		
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.		Mag.
														H. M.		H. M.		
1	6	7	6	6	3	1	4	9	10	10	5	5	6·1	15 11		18	8 30	0
2	7	7	6	4	5	4	8	11	12	10	5	5	6·9	16 34		19	5 30	0
3	4	1	2	6	3	4	6	7	7	3	4	7	4·5	14 10		10	1 49	0
4	3	5	5	7	7	7	8	7	7	5	3	3	5·7	8 45		15	0 36	1
5	4	3	3	5	7	4	6	9	11	11	7	3	5·9	16 31		17	11 30	0
6	4	3	6	4	9	9	9	11	11	12	12	7	8·2	20 59		19	7 4	0
7	5	5	3	3	7	6	4	10	11	12	13	7	7·2	18 31		20	6 37	0
8	4	2	3	7	9	6	4	7	12	13	13	5	7·1	19 23		20	13 19	1
9	5	3	3	5	4	4	7	10	10	8	6	3	5·3	16 27		17	9 56	0
10	1	6	2	5	5	4	8	9	8	7	1	4	5·1	15 15		13	0 0	0
11	5	3	1	7	4	3	7	10	8	7	2	1	4·7	14 58		16	2 6	0
12	5	7	7	3	4	4	7	8	10	8	7	1	6·3	15 28		18	0 0	0
13	8	9	10	3	4	4	7	10	10	9	5	8	7·7	17 54		18	6 44	0
14	7	9	11	7	5	4	8	11	15	15	5	9	8·9	16 39		25	8 50	0
15	9	9	9	7	7	7	11	10	14	12	6	5	8·5	16 38		21	9 37	2
16	8	3	4	3	3	4	6	9	7	9	5	1	4·8	0 5		12	7 9	0
17	2	4	1	7	6	4	6	8	10	5	3	1	4·9	15 30		13	0 0	0
18	1	2	5	2	5	3	9	10	12	6	6	3	5·5	15 38		17	0 0	0
19	5	4	3	3	4	7	9	11	10	7	7	10	7·1	13 46		18	7 23	0
20	11	1	3	3	7	2	9	11	11	7	5	6	6·3	16 30		18	9 23	0
21	7	3	3	4	4	4	7	10	10	9	4	3	5·8	14 12		14	21 6	0
22	4	4	2	3	7	3	10	10	9	8	6	8	6·5	23 45		18	2 50	0
23	9	4	3	3	4	7	11	15	13	15	12	12	9·0	14 26		24	6 26	0
24	11	5	1	3	7	12	14	17	18	12	7	6	9·5	15 20		28	3 12	1
25	7	7	3	4	7	9	10	9	9	6	3	5	6·5	13 53		15	19 55	0
26	3	1	0	1	2	5	7	8	11	10	7	6	5·2	16 12		17	0 15	0
27	6	6	2	2	3	5	7	12	12	11	9	7	6·8	16 28		19	7 40	0
28	3	4	4	4	3	7	11	11	10	7	9	7	7·0	14 8		17	8 16	0
29	10	9	3	3	7	9	10	11	7	4	8	7	7·4	2 2		17	8 5	0
30	5	5	3	3	3	6	7	10	7	6	3	3	5·1	15 59		15	6 29	0
31	1	2	1	4	5	6	7	7	9	6	5	4	5·0	16 49		13	4 14	0
Mean ..	5·5	4·6	3·8	4·2	5·2	5·3	7·9	9·9	10·4	8·7	6·2	5·2	6·5					

APRIL.

1	3	3	3	5	7	5	10	11	12	11	9	6	7·3	14 43		18	9 45	0
2	3	3	5	5	6	8	10	15	15	12	10	12	8·8	16 28		24	0 13	0
3	5	5	7	7	10	7	12	13	11	10	9	10	8·9	14 24		21	0 4	2
4	12	8	4	5	7	9	10	11	11	4	7	10	8·1	15 15		20	19 5	0
5	4	5	2	1	3	4	7	7	7	5	4	6	4·7	13 30		13	3 27	0
6	7	1	1	1	4	5	9	9	7	5	5	4	4·7	13 18		14	1 50	0
7	3	1	0	1	1	6	8	10	9	7	2	5	4·9	14 24		16	7 25	0
8	8	3	5	2	5	5	9	10	9	10	5	3	5·9	14 34		19	6 30	0
9	1	1	1	5	7	5	5	9	9	7	7	6	5·7	14 49		15	0 5	0
10	4	5	3	1	1	3	7	9	10	10	7	4	5·3	18 27		17	5 30	0
11	7	6	5	5	3	4	10	11	12	12	10	11	7·9	15 40		21	9 40	0
12	13	11	9	6	5	3	10	10	12	7	6	5	7·7	16 50		19	9 7	1
13	5	5	1	7	3	5	8	10	8	2	3	3	4·7	13 56		15	2 50	0
14	1	4	1	1	3	7	7	7	5	3	1	1	3·6	11 13		13	0 0	0
15	1	3	3	5	3	5	9	7	8	3	3	3	4·6	12 30		15	0 11	0
16	3	1	1	5	3	5	7	9	7	3	9	15	5·7	21 49		26	1 3	0
17	4	5	3	5	4	5	7	8	9	5	11	12	6·8	22 19		17	7 35	1
18	7	4	7	8	4	5	7	7	7	3	7	6	5·9	16 17		13	19 24	0
19	3	7	7	14	15	11	7	9	7	6	3	3	7·9	6 50		21	20 30	0
20	7	9	7	7	7	5	5	8	7	6	4	3	6·3	3 45		15	23 20	0
21	1	1	1	2	7	3	9	10	9	5	3	3	4·7	15 41		17	0 0	0
22	3	3	1	6	3	5	7	9	7	1	4	7	4·6	23 7		16	3 35	0
23	7	6	3	8	9	9	8	5	5	3	4	5	5·9	11 55		14	17 48	0
24	1	1	1	1	1	5	5	9	7	3	3	2	3·5	14 25		14	0 14	0
25	3	3	3	1	5	5	4	7	7	12	4	4	4·7	18 6		25	1 33	0
26	6	4	9	7	4	2	4	7	7	3	4	1	4·7	5 3		15	2 25	0
27	3	1	1	1	1	3	7	9	7	4	3	4	4·2	14 35		13	0 14	0
28	3	3	3	5	7	8	9	13	13	9	4	4	6·7	16 11		20	0 40	0
29	5	5	3	3	5	7	7	14	13	9	3	7	6·9	15 25		20	8 14	1
30	7	8	4	4	9	9	11	12	13	13	11	9	8·9	16 36		20	7 55	1
Mean ..	4·6	4·2	3·5	4·5	5·1	5·6	7·8	9·5	9·0	6·4	5·5	5·8	6·0					

*Derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

MAY. (IN MILES PER HOUR.)

Date.	Hours.												Mean.*	Maximum.		Minimum.		
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.	
														H. M.		H. M.		
1	8	7	4	5	9	13	14	15	15	13	14	12	10·9	15 36	25	3 15	2	
2	11	11	4	7	10	13	13	14	13	11	12	11	11·1	15 13	23	6 56	1	
3	14	10	7	7	10	11	12	11	11	12	12	10	10·6	13 2	22	5 14	1	
4	10	12	12	10	9	10	10	11	11	7	8	9	9·9	4 35	21	8 15	1	
5	10	9	4	5	7	9	13	13	15	13	12	11	10·3	13 31	24	8 8	0	
6	12	9	4	3	7	10	12	13	8	9	7	8	8·5	15 1	21	8 10	1	
7	7	7	4	5	10	11	12	11	10	9	9	7	8·1	12 12	20	4 30	1	
8	5	5	3	4	3	3	5	9	9	8	5	2	5·1	14 49	15	9 32	0	
9	1	1	1	2	7	7	9	12	12	10	7	7	6·3	14 25	19	0 0	0	
10	7	9	4	9	7	4	11	10	10	10	7	7	7·5	15 6	17	9 35	0	
11	8	8	9	5	7	4	7	10	11	9	7	7	7·5	15 11	18	9 44	0	
12	7	7	5	4	4	7	7	11	11	9	7	10	7·4	15 3	18	8 28	0	
13	9	6	3	1	3	7	9	11	11	7	6	3	6·5	16 32	18	3 41	0	
14	7	5	3	7	7	7	5	7	7	7	5	5	5·8	8 50	12	12 29	0	
15	5	5	7	7	3	12	13	11	10	5	4	5	7·3	12 48	20	8 14	0	
16	3	0	2	1	3	6	9	11	13	12	8	9	6·6	16 10	20	1 30	0	
17	8	9	3	4	3	6	8	12	12	8	10	4	6·9	14 47	18	4 5	0	
18	3	1	1	2	4	8	9	9	9	4	21	13	6·1	21 17	33	0 39	0	
19	3	4	4	3	1	4	7	7	9	7	13	7	5·3	20 21	30	1 0	0	
20	8	6	2	7	3	4	5	7	7	5	1	3	4·8	1 3	17	4 53	0	
21	3	3	3	7	7	10	8	7	5	5	7	10	6·7	11 39	19	0 14	0	
22	10	10	7	7	7	7	7	7	7	5	7	7	7·4	3 5	17	16 20	0	
23	8	5	7	4	5	6	6	7	7	7	6	7	6·1	16 4	14	6 55	1	
24	7	5	5	4	6	7	9	8	8	8	8	7	6·6	12 46	17	6 28	0	
25	5	6	3	4	5	6	8	7	7	6	7	7	6·0	12 45	15	5 32	0	
26	7	5	5	5	5	6	7	7	8	7	5	5	5·9	15 2	13	5 55	1	
27	5	4	3	5	7	7	8	9	10	9	7	7	6·7	16 4	17	6 35	1	
28	5	6	7	5	7	7	9	10	10	9	7	4	7·3	15 15	18	5 53	0	
29	7	5	5	3	5	7	7	9	7	7	5	3	5·7	14 48	14	6 31	0	
30	3	3	3	3	5	4	6	5	6	7	7	5	4·7	17 46	13	5 7	0	
31	3	5	5	4	5	6	6	8	7	9	7	5	5·7	15 8	14	0 50	2	
Mean ..	6·7	6·1	4·5	4·8	5·8	7·3	8·7	9·6	9·5	8·2	8·0	7·0	7·1					

JUNE.

1	7	7	7	6	7	7	10	8	10	7	13	10	8·5	20 34	25	1 25	2	
2	11	13	6	11	5	7	14	10	14	13	11	10	10·5	1 17	23	8 5	0	
3	8	9	11	7	6	3	6	7	9	7	7	5	7·1	3 50	15	9 50	1	
4	6	5	5	6	5	6	6	7	7	7	7	7	6·0	16 19	13	6 35	1	
5	9	7	7	4	5	6	11	11	9	7	8	9	7·6	14 4	16	6 20	0	
6	7	7	7	7	7	9	9	7	9	7	9	8	7·5	21 34	15	8 14	2	
7	7	9	7	7	6	7	9	7	9	7	9	7	7·3	11 50	16	1 14	1	
8	7	7	7	7	5	5	7	7	9	7	9	8	7·0	18 34	16	8 36	1	
9	7	7	7	6	7	7	7	7	7	6	9	5	7·0	5 30	20	6 50	1	
10	19	9	19	17	12	13	12	9	7	10	10	11	12·1	0 7	28	1 20	0	
11	11	10	10	9	11	13	9	9	7	7	4	5	8·5	11 9	20	16 45	1	
12	19	8	10	15	13	13	17	17	15	12	13	11	12·9	0 14	28	19 15	2	
13	10	5	5	7	9	9	7	7	5	3	2	1	5·7	11 56	15	16 25	0	
14	1	6	6	4	2	5	5	7	5	5	7	9	5·4	22 3	16	4 36	0	
15	5	10	9	5	1	7	5	9	7	5	3	5	6·1	17 58	20	6 25	0	
16	7	5	4	5	4	7	10	5	3	5	3	4	5·2	3 12	17	4 45	0	
17	3	4	3	3	3	6	6	7	7	7	6	4	4·9	17 15	14	6 9	0	
18	5	5	5	5	5	5	6	7	6	7	6	7	5·5	19 32	17	19 45	1	
19	7	7	8	4	6	5	7	7	9	6	7	10	6·6	22 40	26	2 14	1	
20	5	6	7	9	9	7	13	15	10	12	11	9	9·4	12 50	29	9 2	0	
21	7	15	16	17	15	17	11	12	19	10	11	10	12·9	16 46	33	13 25	2	
22	9	7	13	14	15	13	13	15	8	5	13	10	11·1	8 30	29	5 41	1	
23	11	13	14	14	18	15	15	9	11	10	12	7	12·5	13 37	31	22 53	2	
24	7	10	11	17	5	3	7	13	15	13	15	9	10·5	20 30	23	1 40	1	
25	6	8	9	11	5	10	11	7	7	7	10	8	8·1	6 36	22	8 20	1	
26	5	15	18	13	17	15	17	15	15	15	12	14	13·9	7 55	31	1 0	0	
27	15	17	15	15	13	13	10	12	13	15	12	10	13·3	2 51	26	11 59	1	
28	10	11	11	11	11	13	11	11	15	12	11	10	11·3	17 10	23	5 14	2	
29	11	10	11	11	9	10	11	11	11	13	11	12	10·9	0 13	24	8 10	2	
30	13	15	15	11	11	13	11	9	10	7	6	6	10·5	16 25	24	18 11	0	
Mean ..	8·5	8·9	9·4	9·3	8·2	9·0	9·8	9·5	9·6	8·5	8·9	8·0	8·9					

*Derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

JULY. (IN MILES PER HOUR.)

Date.	Hours.												Mean.*	Maximum.			Minimum.		
	0	2	4	6	8	10	12	14	16	18	20	22		Time.		Mag.	Time.		Mag.
														H.	M.		H.	M.	
1	5	6	6	11	5	4	7	10	10	9	11	11	8·0	21	35	27	8	30	0
2	10	13	7	13	10	10	13	4	10	7	7	10	9·3	3	21	26	14	45	0
3	7	9	7	8	8	7	9	5	7	7	7	7	7·9	17	28	29	9	28	2
4	9	11	5	5	15	15	13	10	15	9	17	7	10·9	20	33	35	4	20	2
5	11	10	13	13	10	11	10	10	13	15	12	13	12·1	1	42	34	3	57	3
6	14	12	14	14	14	13	13	12	10	12	17	19	13·5	20	39	32	15	16	2
7	15	15	15	11	9	11	9	9	9	13	8	8	10·9	4	31	24	15	30	3
8	15	12	12	12	11	12	11	9	8	10	8	11	10·9	1	26	30	21	2	0
9	7	13	10	7	7	8	10	9	10	15	5	5	8·7	18	36	29	21	17	1
10	7	7	9	5	7	7	7	7	6	5	6	5	6·4	0	22	20	14	5	1
11	5	6	2	5	5	7	7	6	7	7	7	7	5·9	11	23	18	5	25	0
12	7	6	7	8	5	7	9	5	5	6	6	7	6·7	6	16	20	14	45	0
13	7	7	7	10	3	5	10	7	9	6	7	7	6·9	6	4	19	8	15	0
14	7	9	14	7	9	11	9	8	9	13	9	9	8·8	3	48	23	7	18	0
15	7	8	11	11	9	9	10	12	10	11	8	10	9·1	10	41	22	5	25	1
16	9	8	11	7	8	9	10	9	7	8	7	7	8·7	11	8	25	6	49	1
17	10	8	9	7	7	9	7	6	7	5	6	7	7·1	0	8	20	3	10	0
18	6	5	5	7	7	6	7	6	6	5	5	14	6·9	23	56	24	13	11	0
19	12	7	7	11	7	7	6	7	8	10	8	3	8·1	17	5	27	22	0	0
20	5	9	9	9	9	10	7	9	7	7	8	10	8·3	23	15	23	14	50	1
21	16	16	14	12	15	13	9	15	16	15	19	17	14·1	20	26	31	0	10	2
22	19	14	15	16	16	12	15	15	12	15	15	13	14·5	0	46	33	4	4	4
23	13	12	15	15	13	15	7	9	7	9	9	9	10·8	4	28	30	13	34	3
24	7	10	11	12	13	9	9	9	8	11	12	13	10·3	17	29	30	13	18	1
25	13	13	15	12	13	13	12	15	12	16	15	12	13·3	18	6	34	15	25	2
26	14	13	16	15	15	15	14	15	12	12	13	12	13·3	5	31	30	16	36	2
27	13	15	13	15	15	15	14	13	17	12	14	15	14·5	22	42	36	12	35	3
28	17	15	17	15	17	15	12	13	13	11	15	15	14·7	8	11	31	18	36	1
29	15	15	15	16	17	13	13	13	13	12	12	14	14·3	11	46	29	4	2	3
30	16	12	12	13	13	13	15	13	15	12	13	11	13·1	0	39	27	20	51	2
31	12	12	12	11	10	10	10	10	11	10	9	9	10·4	3	55	24	9	36	2
Mean ..	10·6	10·6	10·8	10·7	10·4	10·4	10·1	9·7	10·0	10·2	10·2	10·2	10·3						

AUGUST.

1	9	12	12	10	11	11	11	10	9	11	9	8	10·3	2	20	22	20	37	1
2	10	11	10	9	9	9	10	10	10	9	9	9	9·3	16	12	22	7	38	2
3	8	9	9	9	11	9	10	10	7	9	11	9	9·3	20	36	24	21	20	1
4	9	13	11	10	7	7	10	9	9	5	6	7	8·7	3	39	22	4	56	2
5	11	12	9	9	9	8	10	7	7	7	7	8	8·7	4	56	24	16	42	1
6	9	9	10	10	9	11	9	10	5	7	5	7	8·5	6	48	20	18	10	1
7	7	8	9	8	9	11	7	5	7	7	7	7	7·8	11	2	23	13	20	2
8	9	7	9	7	6	5	8	5	7	5	6	7	6·7	13	24	19	7	8	0
9	7	8	8	7	9	9	9	10	10	8	9	9	8·7	11	14	23	0	34	2
10	10	10	10	7	13	8	9	9	10	7	9	9	9·3	8	48	23	5	43	2
11	10	9	9	10	14	10	9	13	7	7	9	9	9·9	8	30	27	9	43	1
12	9	15	7	15	12	9	12	10	9	10	11	7	10·9	12	58	29	0	31	2
13	10	12	7	10	11	10	14	13	10	8	9	7	10·0	6	58	29	0	54	2
14	8	9	10	9	11	11	10	9	8	9	7	11	9·1	4	17	23	0	26	2
15	13	11	13	9	13	11	11	12	12	11	11	11	11·3	4	41	26	3	33	2
16	12	14	12	15	12	13	12	9	11	11	9	6	11·5	23	21	23	7	10	3
17	12	6	12	15	8	7	9	9	13	11	8	7	9·9	6	24	22	8	47	3
18	9	10	12	11	8	7	10	11	13	11	12	13	10·9	22	59	24	9	7	3
19	12	15	15	17	17	15	15	15	15	15	15	11	14·9	3	23	28	22	30	4
20	15	11	12	13	13	11	11	15	14	14	15	15	13·7	17	35	26	2	35	4
21	15	15	12	12	10	11	10	12	13	10	11	9	11·6	1	30	26	8	11	3
22	8	11	9	11	11	9	11	11	8	9	7	6	9·3	2	58	23	0	41	2
23	9	7	9	9	8	7	9	13	10	11	10	9	9·2	15	15	21	1	37	1
24	9	8	7	7	4	9	11	10	8	10	8	7	8·1	13	12	15	16	36	0
25	12	7	7	11	7	4	8	9	5	4	3	5	6·6	0	14	16	16	59	0
26	6	6	6	7	6	4	8	4	6	5	3	7	5·5	5	10	17	17	36	0
27	6	5	5	4	7	5	7	2	4	3	4	7	4·5	12	26	17	6	9	0
28	7	5	3	5	8	7	7	8	7	7	3	6	6·1	8	5	19	21	7	0
29	7	7	7	7	8	7	7	7	7	5	2	3	6·1	12	18	14	23	34	1
30	4	5	5	6	3	5	7	8	9	7	7	5	6·1	13	55	17	8	0	0
31	10	9	9	7	9	7	12	11	11	12	11	10	9·8	20	7	20	1	48	2
Mean ..	9·4	9·5	9·2	9·5	9·5	8·6	9·8	9·5	9·1	8·5	8·2	8·1	9·1						

*Derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

SEPTEMBER. (IN MILES PER HOUR.)

Date	Hours.												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	10	9	11	11	11	11	14	12	12	10	11	11	11·3	3 24	22	3 21	4
2	7	8	13	13	16	9	11	11	10	12	9	11	11·1	8 15	22	2 20	2
3	11	12	13	14	17	5	13	3	2	7	11	10	9·9	8 51	28	17 4	0
4	11	10	11	11	11	10	12	11	9	6	9	7	9·7	6 45	18	9 50	2
5	7	7	7	6	8	7	8	7	7	7	7	7	6·9	11 48	18	10 48	1
6	7	5	7	7	9	5	5	7	7	5	10	9	6·8	23 15	19	13 9	1
7	11	8	8	8	7	7	5	7	9	7	7	6	7·4	5 59	18	14 48	1
8	6	7	6	7	9	5	9	7	8	7	7	7	6·9	12 18	18	7 17	1
9	10	7	5	4	5	5	3	6	5	5	7	8	5·9	0 42	19	3 4	2
10	7	5	5	4	7	3	4	3	3	2	1	2	3·9	7 5	15	7 34	0
11	3	4	3	6	3	3	3	4	5	6	7	3	4·0	20 55	13	17 15	0
12	6	5	6	5	3	7	8	8	8	7	7	5	6·3	7 53	15	8 34	0
13	5	5	4	4	4	5	7	8	7	6	5	5	5·5	15 15	12	3 10	0
14	5	3	5	4	6	7	8	6	5	5	7	6	5·5	12 50	11	15 55	0
15	4	5	7	7	7	7	5	7	12	9	7	7	7·1	16 40	21	6 53	0
16	8	7	8	9	9	15	9	12	13	9	9	8	9·9	10 10	23	22 4	0
17	7	7	9	7	9	9	9	12	12	11	10	9	9·0	16 37	20	7 32	0
18	9	11	10	9	9	11	11	9	9	7	9	9	9·3	10 8	17	9 45	2
19	11	11	9	11	9	9	11	12	12	9	9	7	9·7	15 15	19	19 26	1
20	10	10	14	9	7	9	13	12	10	9	9	9	10·2	0 28	20	20 27	0
21	9	8	8	9	7	6	7	7	6	3	4	8	6·9	0 40	19	10 45	0
22	7	9	3	4	11	12	9	3	1	1	3	5	5·5	11 13	17	14 30	0
23	5	7	7	7	7	4	3	3	3	3	3	3	4·9	5 56	11	9 5	0
24	3	3	5	7	6	3	3	7	5	6	4	3	4·3	7 5	10	3 43	0
25	1	1	6	6	7	2	4	7	7	7	4	5	4·7	15 50	12	4 0	0
26	4	3	1	2	2	4	7	7	7	6	5	4	4·5	13 2	12	8 42	0
27	4	3	1	1	3	1	5	6	6	5	3	3	3·5	14 55	12	7 20	0
28	3	3	3	5	3	3	7	9	9	9	7	6	5·6	17 30	15	7 52	0
29	3	3	3	3	5	4	7	7	10	9	7	5	5·3	17 48	17	7 6	0
30	3	3	3	5	5	1	7	8	8	7	7	6	5·5	15 34	14	10 23	0
Mean ..	6·6	6·3	6·7	6·8	7·4	6·3	7·6	7·6	7·6	6·7	6·8	6·5	6·9				

OCTOBER.

1	4	7	3	3	3	1	7	9	12	7	7	6	5·9	16 25	18	10 48	0
2	7	8	4	4	5	2	7	12	12	11	7	3	6·9	18 57	27	10 10	0
3	3	4	3	4	5	3	7	10	12	8	4	5	5·7	14 32	19	4 12	0
4	3	5	1	3	3	1	5	7	9	7	5	2	4·1	16 23	13	5 25	0
5	2	5	5	1	3	1	4	7	9	5	7	5	4·7	16 33	16	6 23	0
6	4	7	7	2	4	6	7	10	10	10	5	5	6·8	14 52	18	6 45	0
7	3	7	5	1	7	4	7	8	7	7	7	4	5·5	15 10	15	5 40	0
8	5	5	4	1	1	3	5	7	5	3	1	3	3·5	14 50	11	8 5	0
9	4	5	1	1	6	5	3	5	5	1	2	7	4·7	23 15	18	0 45	0
10	14	7	3	2	5	1	4	7	7	5	7	15	7·1	23 21	26	6 44	0
11	12	10	8	11	12	7	7	1	5	7	5	4	7·4	8 2	25	13 51	0
12	3	1	5	5	5	4	3	4	3	3	3	2	3·5	6 55	8	1 19	0
13	3	3	4	5	6	3	2	4	5	4	3	3	3·7	8 25	9	6 24	0
14	5	5	3	3	6	4	5	6	7	7	5	3	4·8	14 33	10	11 25	0
15	3	4	9	8	5	2	4	7	9	5	4	4	5·1	16 49	13	10 45	0
16	4	6	5	5	5	3	3	7	7	7	5	3	5·1	14 44	12	4 2	2
17	3	7	5	3	5	5	5	7	9	8	5	4	5·2	18 29	14	5 50	2
18	4	4	5	6	6	5	3	8	12	11	8	3	6·2	15 8	18	13 6	1
19	5	7	5	7	7	6	4	6	7	8	7	3	6·1	19 6	14	22 3	1
20	3	3	5	4	3	2	4	5	5	3	2	2	3·5	22 57	8	16 2	0
21	3	7	3	4	5	5	3	5	5	7	5	4	4·6	15 38	10	5 34	0
22	2	3	3	5	5	2	3	5	6	4	3	4	3·9	15 44	9	10 46	2
23	3	7	3	3	7	6	3	5	7	5	4	3	4·7	16 54	12	4 35	2
24	4	1	3	7	9	5	3	7	7	4	3	3	4·5	8 27	12	13 55	0
25	3	3	7	6	9	7	3	5	6	5	5	5	5·1	8 10	13	13 30	0
26	4	5	7	3	4	3	3	9	7	8	7	6	5·5	14 49	14	8 8	0
27	7	9	8	8	7	5	6	7	7	7	7	4	6·2	19 12	14	23 0	0
28	5	6	5	8	7	3	5	7	8	7	4	2	5·7	16 36	14	22 32	0
29	3	11	9	6	5	5	2	7	9	11	7	5	6·7	17 9	18	0 2	0
30	3	5	7	5	4	3	1	7	7	7	5	7	5·1	17 42	12	6 17	0
31	3	2	3	1	5	5	3	7	9	7	7	6	5·0	16 42	26	3 5	0
Mean ..	4·3	5·5	4·8	4·4	5·5	3·8	4·2	6·7	7·6	6·4	5·0	4·4	5·2				

* Derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

NOVEMBER. (IN MILES PER HOUR.)

Date	Hours.												Mean*	Maximum.		Minimum.		
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.		Mag.
														H.	M.		H.	M.	
1	4	4	4	5	9	7	3	5	7	5	7	3	5·0	20	20	11	15	44	0
2	3	4	7	8	10	7	1	7	7	7	6	3	6·0	8	15	14	0	0	0
3	4	7	11	10	9	7	4	7	9	12	7	3	7·3	17	25	18	23	18	1
4	7	5	6	10	10	6	2	9	9	10	7	3	7·0	17	27	15	12	50	0
5	7	7	7	6	5	5	5	9	9	9	4	7	6·3	16	43	14	8	30	0
6	9	11	8	13	7	5	5	7	5	5	4	7	7·2	5	49	17	8	45	0
7	7	8	8	9	7	3	4	5	4	5	1	7	5·8	3	45	17	11	45	0
8	4	5	5	3	7	3	4	7	7	9	7	3	5·3	17	51	14	6	4	0
9	3	3	5	7	5	5	5	7	10	9	9	5	5·9	15	56	17	21	22	0
10	4	3	7	5	5	5	3	5	4	3	3	3	4·1	3	55	9	9	25	0
11	4	7	11	7	7	7	1	4	2	3	4	3	5·2	4	6	15	13	30	0
12	2	4	3	5	3	5	4	6	8	8	9	3	4·8	16	24	14	11	25	0
13	3	5	5	5	5	6	4	12	12	10	7	5	6·7	14	21	20	11	35	0
14	5	5	6	7	8	4	4	7	8	9	6	5	6·3	15	47	14	13	4	2
15	3	3	5	8	9	9	5	2	7	7	7	4	5·7	19	54	15	15	28	0
16	3	2	4	5	5	5	2	5	7	9	7	4	4·8	17	42	15	13	41	1
17	3	3	5	7	8	7	4	5	7	10	7	5	5·8	18	6	17	12	5	0
18	2	5	7	8	11	9	5	3	5	10	10	4	6·1	18	32	16	0	34	1
19	5	9	9	9	11	7	5	4	8	11	9	3	7·5	17	25	18	14	43	2
20	5	3	4	7	9	5	4	3	7	11	8	5	6·0	19	6	17	2	33	1
21	7	6	5	3	6	4	3	6	7	9	5	3	5·5	17	57	15	6	53	2
22	4	9	7	9	7	6	3	7	8	9	7	5	6·9	19	16	16	12	24	1
23	4	5	5	6	7	8	1	8	11	11	9	3	6·5	18	55	20	12	59	0
24	2	5	5	4	3	3	1	7	6	7	5	1	4·0	13	52	11	8	18	0
25	1	5	3	3	4	5	4	9	10	5	3	5	4·5	15	11	17	7	8	0
26	1	3	1	5	9	7	3	3	7	11	8	4	5·3	18	15	18	0	20	0
27	6	7	6	9	9	9	4	3	11	10	7	2	6·7	19	28	19	13	50	0
28	3	4	4	5	5	5	3	7	10	10	11	5	6·1	17	13	18	12	47	0
29	3	7	9	7	9	7	4	7	9	7	9	5	6·7	19	24	16	1	44	2
30	3	9	7	11	11	3	7	5	9	9	8	3	7·2	18	6	18	0	35	0
Mean ..	4·0	5·4	6·0	6·9	7·3	5·8	3·6	6·0	7·7	8·3	6·7	4·0	5·9						

DECEMBER.

1	6	5	7	10	9	6	10	5	5	9	7	4	6·9	12	6	14	1	43	2
2	8	7	7	11	12	11	4	5	9	12	11	1	8·3	17	41	17	22	4	0
3	3	7	9	9	11	7	3	5	9	10	7	3	6·7	18	34	15	13	2	0
4	3	5	5	7	7	5	3	6	5	4	5	4	4·9	8	14	11	13	28	0
5	5	7	7	7	7	5	5	7	7	7	4	3	5·7	15	32	13	11	45	0
6	1	3	5	5	5	4	1	3	3	3	3	3	3·3	15	4	8	0	8	0
7	6	7	5	7	7	6	4	7	9	10	9	4	6·3	19	5	16	9	37	1
8	1	4	6	9	7	5	1	3	5	7	7	3	4·9	19	36	12	14	10	0
9	3	4	4	5	4	6	7	7	7	7	6	3	4·9	11	54	13	9	51	0
10	3	3	3	7	5	3	6	6	6	5	3	3	4·4	15	8	10	7	50	0
11	3	3	7	7	6	3	3	4	4	5	3	2	4·3	5	58	11	2	5	0
12	6	7	10	12	13	9	4	6	5	3	4	5	6·8	8	14	14	12	30	0
13	5	9	4	4	7	4	4	5	5	5	5	3	4·9	3	11	15	11	4	0
14	5	4	5	6	7	7	7	7	12	12	8	6	7·1	17	2	20	12	50	0
15	5	5	5	5	7	5	3	7	9	9	10	5	6·1	16	22	15	12	50	0
16	1	4	6	10	9	10	1	6	5	7	7	5	6·3	6	39	14	12	30	0
17	3	4	4	5	5	4	5	7	9	7	7	6	5·5	16	16	13	11	19	0
18	4	4	5	5	5	4	4	7	11	8	7	3	5·5	16	32	16	12	6	0
19	2	3	6	9	7	5	1	3	5	5	5	3	4·7	6	55	11	0	50	0
20	3	4	4	6	6	4	5	9	7	9	9	5	5·9	14	49	15	9	35	0
21	5	5	6	5	5	5	6	6	8	9	9	4	6·1	19	11	15	10	50	0
22	4	4	3	3	5	5	5	7	4	3	4	4	4·2	14	19	11	11	28	0
23	2	4	5	6	6	4	6	8	9	9	11	5	6·0	19	11	16	3	22	0
24	4	5	4	4	5	5	4	7	9	10	9	7	6·2	19	35	17	9	53	0
25	5	5	5	4	10	10	7	7	9	10	7	6	7·1	7	51	16	13	55	1
26	11	12	12	12	13	10	5	7	5	8	7	3	8·5	8	4	19	10	56	1
27	7	9	9	11	12	11	7	5	8	11	7	4	8·2	19	10	16	14	11	1
28	3	5	6	10	10	7	5	3	6	9	8	6	6·7	19	51	16	14	15	2
29	4	5	5	7	13	8	4	7	8	8	9	3	6·5	8	16	17	1	17	2
30	4	5	7	8	8	8	4	6	7	9	9	4	6·5	17	43	16	13	28	1
31	3	4	7	7	8	5	2	7	9	11	9	7	6·5	17	28	19	0	48	0
Mean ..	4·1	5·2	5·9	7·2	7·8	6·2	4·4	6·0	7·1	7·8	7·0	4·1	6·0						

* Derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

JANUARY.

Date.	Hours.												* Mean direction.
	0	2	4	6	8	10	12	14	16	18	20	22	
1	N	NNE	NE	NE	N	NNW	NNW	NNW	NNW	NNW	N	N	N
2	N	NNE	NNE	NNE	NNE	NW	NNW	NW	NNW	NNW	N	N	N
3	N	NNE	NNE	NNE	ENE	ENE	NW	NW	NNW	NNW	N	N	N
4	N	NE	ENE	NE	ENE	ENE	ESE	E	NNW	NNW	NNW	NNW	NE
5	NNW	E	ESE	E	E	E	SSE	W	W	W	W	SE	SE
6	SE	SE	SE	SE	SE	ESE	W	W	W	WNW	Calm	WNW	SSW
7	WNW	WNW	SSE	ESE	ESE	E	W	WNW	WNW	WNW	WNW	WNW	W
8	WNW	NE	ENE	ENE	ENE	ESE	NW	WNW	NW	NW	N	N	NNW
9	NNE	NNW	NNE	NNE	N	ENE	NNW	NNW	NNW	NNW	N	NNE	N
10	NNE	NNE	N	NNE	NNE	ENE	NW	NW	NNW	NNW	N	NNE	N
11	NNE	NE	NE	ENE	ENE	ENE	ENE	NW	NNW	NNW	N	N	NNE
12	NE	ENE	ENE	ENE	E	E	E	WNW	WNW	NNW	NNW	N	NNE
13	N	N	NNE	ENE	ENE	NE	NW	NW	NW	NNW	N	NNE	N
14	NNE	NNE	N	N	ENE	ENE	NW	NNW	NNW	NNW	NNW	NNE	N
15	NNE	NNE	ENE	ENE	ENE	ENE	NW	NW	NNW	NNW	NNW	NNE	NNW
16	NNE	NNE	NNE	NE	ENE	ENE	ENE	WNW	NW	NNW	NNW	N	N
17	ENE	E	E	E	E	ENE	WNW	WNW	NW	NNW	NNW	NNW	NNE
18	NNW	NNW	NE	NE	ENE	NW	NW	NW	NW	NW	NW	N	NNW
19	N	N	N	N	NE	ENE	NW	NW	NW	NNW	NNW	NNW	NNW
20	N	NE	NNE	NNE	NNE	NNW	NW	NW	NW	NNW	N	N	NNW
21	N	NW	ESE	ESE	ENE	NNW	NW	NW	NNW	NNW	NNW	NNE	NNW
22	N	NE	ENE	NNE	NNE	NNW	NNW	NNW	NNW	N	N	NNE	N
23	NNE	NE	NNE	NE	ENE	ENE	ENE	NW	NNW	NNW	N	NNE	NNE
24	NNE	NNE	NE	NE	ENE	ENE	WNW	NW	NW	NNW	N	N	N
25	NNE	ENE	ENE	ENE	ENE	ENE	NW	NW	NNW	NNW	NNW	NNW	N
26	NE	NNW	NE	ENE	ENE	ENE	WNW	WNW	NW	NNW	N	N	N
27	NE	N	N	NE	NE	E	NW	WNW	NW	NNW	NNW	NNE	NNW
28	NNE	NNE	NNE	NNE	NNE	NNW	NW	NW	NW	NNW	NNW	NNW	NNW
29	NNW	NNE	NNE	N	N	NNW	NW	NW	NNW	NNW	NNW	N	NNW
30	NNE	NNE	NNE	NNE	NNE	ENE	NW	NNW	NNW	NNW	NNW	N	N
31	N	N	ENE	NE	NE	ENE	NW	NNW	NNW	NNW	NNW	N	N
Mean direction.	NNE	NNE	NE	NE	ENE	NE	NW	NW	NW	NNW	NNW	N	N

FEBRUARY.

1	N	N	E	ENE	ENE	ENE	WNW	WNW	WNW	W	NNW	ENE	NNE
2	ENE	NNW	NNW	NNW	E	ESE	NW	NW	NW	NNW	NNW	NNW	NNW
3	NW	NW	NNE	NE	ENE	NNW	NW	NW	NW	NNW	N	NNE	NNW
4	NNE	NNE	NNE	NNE	NNE	NE	NW	NW	NW	NNW	NNW	NNW	N
5	N	ENE	ENE	NE	ENE	ENE	ENE	NW	NNW	NNW	NNW	NNE	NNE
6	ENE	E	NE	ENE	ENE	ENE	ENE	NW	NW	NNW	NNW	E	NE
7	E	E	NNE	ENE	ENE	ENE	ENE	WNW	WNW	NNW	NNW	NNE	NNE
8	E	ESE	ESE	E	E	ENE	NW	WNW	WNW	NW	NNW	NNE	NNE
9	NNE	NNE	N	NE	NE	ENE	NW	NNW	NNW	NNW	NNW	N	NNW
10	N	N	N	N	ENE	ENE	NW	NW	NNW	NNW	NNW	NNE	N
11	ENE	N	N	NE	ENE	ENE	ENE	W	WNW	WNW	WNW	WNW	NNW
12	SSE	ESE	ESE	ESE	ESE	ESE	W	WNW	WNW	NW	NW	N	NNW
13	N	NE	NE	NE	ENE	ENE	NW	WNW	NW	NW	NNW	NNW	NNW
14	NNW	Calm	E	E	ENE	ENE	NW	NW	NW	NW	NNW	N	NNW
15	N	N	NNE	NNE	NNE	NW	NW	NW	NNW	NNW	NNW	NNE	NNW
16	NNW	NNW	NNW	N	N	NW	NW	NW	NW	NW	NNW	NNW	NNW
17	NNW	NNW	NNW	N	NNW	NW	NW	NW	NW	NW	NW	NW	NW
18	NW	NW	NW	NW	NNW	NW	NW	NW	NW	NW	NW	NW	NW
19	NNW	NNW	NE	NE	NE	ENE	NW	NNW	NW	NNW	N	N	NNW
20	N	N	NNE	ENE	NE	E	WNW	NW	NW	NNW	N	ENE	NNW
21	ENE	N	N	NNE	NE	NW	NW	NW	NW	NNW	NNW	N	NNW
22	N	N	N	NE	ENE	ENE	NW	NW	NW	NNW	N	N	NNW
23	N	N	N	N	ENE	NW	NW	NW	NW	NNW	NNW	NNW	NNW
24	NNW	N	N	N	N	NNW	NW	NNW	NW	NW	NNW	NNW	NNW
25	NNW	NNW	N	NNE	N	NW	NW	NW	NW	NW	NNW	NNW	NNW
26	NW	NW	NNW	NNE	N	NW	NW	NW	NW	NW	NW	NNW	NW
27	NNW	NNW	NNW	NNW	NW	NW	WNW	WNW	WNW	NW	NW	NW	NW
28	NW	NNW	NE	E	ESE	NW	NW	NW	NW	NNW	NNW	NNE	NNW
Mean direction.	N	N	NNE	NE	NE	N	NW	NW	NW	NNW	NNW	N	NNW

* Derived from 24 hourly directions.

The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

MARCH.

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	* Mean direction
1	NNW	NNW	N	NNE	ESE	ESE	NW	WNW	NW	NNW	N	WNW	NNW
2	NW	NNW	NNW	NE	NE	SE	W	WNW	NW	NNW	NNW	NNW	NNW
3	NNW	NNW	NNW	ESE	ESE	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
4	WNW	NW	NNW	NNW	NW	NW	NW	WNW	WNW	WNW	NW	NW	NW
5	N	N	NNE	ENE	ESE	E	WNW	WNW	NW	NW	NNW	NE	NNW
6	NE	NE	NE	NNE	N	NNW	NW	NW	NW	NNW	NNW	N	NNW
7	NNE	N	NE	NE	ENE	ENE	NW	NW	NW	NNW	NNW	N	N
8	N	NNE	NNE	NNE	ENE	ENE	ENE	NW	NNW	NNW	NNW	N	N
9	N	ESE	NE	ENE	NE	NW	WNW	NW	NW	NW	NNW	NNW	NNW
10	NNW	ESE	ESE	ESE	E	NW	NW	WNW	NW	NNW	NNW	NNW	NNW
11	NNW	SW	WNW	WNW	SE	SE	SE	NW	NW	WNW	WNW	WNW	NNW
12	NW	NNW	N	ENE	ENE	NW	NW	NNW	NNW	NNW	NNE	E	NNW
13	NNW	NNW	NNW	ESE	E	NW	NW	NNW	NNW	NNW	NNW	NW	NNW
14	NNW	NNW	NNW	N	N	NW	NW	NNW	NNW	NNW	N	NNW	NNW
15	NNW	N	N	N	N	NW	NW	NNW	NNW	NW	NNW	NNW	NNW
16	NNW	N	N	N	N	NW	WNW	WNW	NW	NW	NW	NW	NW
17	NW	NNW	NE	ESE	ESE	WSW	W	W	W	WNW	NW	NW	WNW
18	NW	NW	N	NE	ESE	E	WNW	WNW	WNW	NW	NW	NNW	NW
19	NW	N	N	NNE	NE	NW	NW	NW	NW	NW	NW	NW	NW
20	NNW	NNE	NNE	NNE	N	NW	NW	NW	NW	NW	NW	NW	NNW
21	NNW	NNE	NNE	NE	NNE	WNW	WNW	WNW	WNW	WNW	NW	NW	NW
22	NW	NNW	NE	ENE	SE	SE	W	WNW	NW	NW	NW	NNW	NW
23	NNW	NE	NNE	NNE	N	NW	NW	NW	NW	NW	NNW	NNW	NNW
24	NNW	N	NNE	N	NNW	NNW	NW	NW	NW	NW	NNW	NW	NNW
25	NNW	NNW	NNW	NNW	NNW	NW	NW	NW	WNW	WNW	WNW	WNW	NW
26	WNW	NW	Calm	NW	WNW	WNW	NW	NW	WNW	NW	NW	NNW	NW
27	NW	NNW	N	NNE	ENE	WNW	NW	WNW	NW	NW	NW	NNW	NW
28	NNE	NNE	NE	NE	ENE	NW	NW	NW	NW	WNW	NW	NW	NW
29	NW	NNW	NE	NE	N	NW	NW	NW	NW	NW	NW	WNW	NW
30	NW	NW	NW	NNE	ENE	NW	NW	NW	NW	NW	NW	NW	NW
31	NW	NW	NNE	NE	E	NW	NW	NW	NW	NNW	NNW	NNW	NNW
Mean Direction.	NNW	NNW	N	NNE	NE	NW	WNW	NW	NW	NW	NNW	NNW	NNW

APRIL.

1	NNW	NNW	NNE	ENE	ENE	NW	NW	NW	NW	NW	NW	NNW	NNW
2	NNW	NNE	NNE	NE	NNE	NNW	NW	NW	NNW	NNW	NNW	NNW	NNW
3	NNE	NNE	NNE	N	N	NW	NW	NW	NW	NW	NNW	NNW	WNW
4	NNW	N	N	N	NNW	NW	NW	NW	NW	NW	SSW	SSW	NW
5	SW	SSW	W	W	E	NW	WNW	WNW	W	W	SW	SSW	WSW
6	SSW	SSE	SSE	SSE	SSE	W	WNW	WNW	W	W	SSW	SSW	WSW
7	SSW	SSW	Calm	SSW	SSE	WNW	WNW	WNW	NW	WNW	WNW	NNW	WNW
8	NNW	N	ENE	ENE	ENE	WNW	WNW	NW	NW	NW	NW	NW	NW
9	NW	NW	NW	SSW	SSW	SSW	WSW	W	WNW	WNW	WNW	NW	W
10	NNW	NNE	ENE	ENE	ENE	W	W	WNW	WNW	WNW	NW	N	NW
11	NNW	N	NNE	NNE	ENE	NW	NW	NW	NNW	NNW	NNW	NNW	NNW
12	NNW	NNW	ESE	ESE	ESE	ESE	WNW	NW	NW	NW	NNE	NNW	NNW
13	NNW	NW	NNW	SSE	SE	W	W	WNW	WNW	WNW	SSW	SW	W
14	SW	SW	SW	SW	SW	SSW	SSW	W	W	WNW	WNW	WNW	WSW
15	WNW	NW	E	ENE	ESE	WNW	NW	WNW	WNW	NW	SW	W	NW
16	W	W	W	SE	SE	WNW	W	WNW	WNW	WNW	SSW	SSW	SW
17	SW	WNW	NNW	NE	NNE	WNW	W	W	WNW	WNW	SSW	SSW	WSW
18	SSW	WSW	SSE	SE	SE	WSW	W	W	W	WSW	SSW	SSW	SW
19	SW	SSW	SSW	S	S	SSW	WSW	W	W	W	W	SW	SW
20	SSW	S	SSE	SSE	SSE	SSW	WSW	W	WNW	WNW	WNW	WNW	SW
21	WNW	WNW	WNW	WNW	SE	W	W	WNW	WNW	WNW	WNW	WSW	W
22	W	W	W	SE	SSE	W	W	W	W	W	SW	SSW	WSW
23	SSW	SSW	SSW	SSE	SSE	SSW	SSW	SW	WSW	W	SW	SSW	SSW
24	SSW	SSW	W	W	SSW	SSW	WSW	W	W	W	SSW	W	WSW
25	W	W	WSW	WSW	SSW	SSW	SW	WSW	W	ESE	ESE	ESE	SW
26	SSW	WSW	S	SE	S	SW	WSW	W	W	WSW	SW	SW	SW
27	WSW	W	W	W	SE	WNW	W	WNW	WNW	WNW	WNW	WNW	WNW
28	WNW	WNW	NW	NNW	NNW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
29	NW	NNW	NNE	NNE	NNW	NW	WNW	WNW	WNW	WNW	WNW	NW	NW
30	NNW	NNW	NNE	NNE	NNW	NNW	NW	NW	NW	NW	NW	NW	NW
Mean direction.	WNW	WNW	E	ESE	ESE	W	WNW	WNW	WNW	WNW	W	W	WNW

*Derived from 24 hourly directions.

The direction at any hour repesents the prevailing direction between that hour and the succeeding hour.

MAY.

Date.	Hours.												*Mean direction
	0	2	4	6	8	10	12	14	16	18	20	22	
1	NW	NNW	NE	NE	NNW	NNW	NW	NW	NW	NW	NW	NW	NW
2	NNW	NNW	NNE	NNE	NNW	NW	NW	NW	NW	NW	NW	NNW	NW
3	NW	NNW	NNW	NNE	NNW	NW	NW	NW	WNW	WNW	NW	NW	NW
4	NW	NNW	NNW	NNW	NNW	NW	WNW	NW	NW	WNW	WNW	NW	NW
5	NW	NNW	NNE	NNE	NNW	NW	NW	NW	NW	NW	NW	NW	NW
6	NNW	NNW	NNE	NNE	NNW	NW	NW	NW	WNW	WNW	WNW	NW	NW
7	NW	NNW	NNE	NNE	N	NW	NW	WNW	WNW	WNW	W	WNW	NW
8	WNW	NW	NNW	ENE	E	W	WSW	WNW	WNW	WNW	WNW	WNW	WNW
9	WNW	NW	NW	NW	NNW	NW	NW	NW	NW	NW	NW	NW	NW
10	NNW	NNW	NNE	N	NNE	WNW	WNW	NW	NW	NW	NW	NW	NW
11	NW	NNW	NNW	NE	E	W	W	WNW	WNW	NW	NW	NW	NW
12	NNW	NNW	NNE	NE	NNE	WNW	WNW	WNW	NW	NW	NNW	NW	NW
13	NNW	NNW	NNE	NNE	SSE	WNW	WNW	NW	NW	SSE	SSW	SW	WNW
14	NW	NNW	ENE	ENE	SSE	WSW	WSW	W	WNW	NW	NNW	NNW	WNW
15	NNW	NW	NNW	ENE	WSW	W	W	WNW	WNW	NW	NW	NNW	WNW
16	NNW	Calm	NNW	NW	WNW	W	WNW	WNW	WNW	WNW	NW	NNW	WNW
17	NNW	NNW	NNE	NNE	S	W	WNW	WNW	WNW	NW	NNW	NNW	NWS
18	NW	NW	NW	NW	SSW	W	WNW	WNW	WNW	WNW	S	SSW	WSW
19	SW	SW	WSW	WSW	WSW	WNW	WNW	WNW	WNW	W	ESE	SSW	WSW
20	ESE	SW	WSW	SE	SE	WSW	WSW	WSW	W	WSW	W	SSW	SW
21	SW	SSW	SSW	SE	SSW	SW	SW	WSW	WSW	SW	SSW	SSW	SSW
22	SSW	SSW	SSW	SSW	SSW	SSW	SW	WSW	WSW	SW	SSW	SSW	SSW
23	SSW	SSW	SSW	SW	SW	SW	WSW	SW	SW	WSW	W	W	SW
24	W	WSW	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW
25	WSW	W	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
26	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	WSW	WSW	WSW
27	WSW	WSW	W	W	W	W	W	W	W	WNW	WNW	WNW	W
28	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	WNW	WNW
29	W	W	W	W	W	WNW	W	W	W	W	WNW	WNW	W
30	WNW	WNW	WSW	WSW	SW	WSW	WSW	W	WSW	WSW	W	W	WSW
31	WSW	W	WSW	WSW	WSW	WSW	WSW	W	W	W	WSW	WSW	W
Mean direction.	WNW	NW	NW	N	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW

JUNE.

1	SW	WSW	WSW	WSW	WSW	SW	W	W	WSW	SW	SSW	SSE	SW
2	SSE	SSE	E	SSW	SE	S	SSW	SSW	SSW	S	S	SSE	S
3	SSE	S	SSE	SE	S	SW	WNW	WNW	WNW	W	WNW	WNW	SW
4	WNW	WNW	WNW	NW	WNW	WNW	WNW	W	WNW	WNW	WNW	WNW	WNW
5	W	W	WNW	WNW	WSW	WSW	W	W	W	W	W	W	W
6	W	W	W	W	W	W	W	W	W	WSW	WSW	W	W
7	WSW	W	W	WSW	WSW	WSW	W	W	WSW	WSW	W	W	WSW
8	WSW	WSW	WSW	WSW	SW	WSW	SW	SW	WSW	WSW	WSW	SW	WSW
9	SW	SW	WSW	WSW	WSW	SW	SW	WSW	WSW	SSW	SW	SW	SW
10	SSE	SSW	SSE	SSE	SSW	SSW	SSW	SW	SSW	SSW	S	S	S
11	SSW	S	SSE	SSE	S	SSW	SW	WSW	SW	SW	SW	SW	SSW
12	SSE	SSW	SSW	SSE	SSE	S	S	SSW	SSW	SSW	SSW	SSE	S
13	SE	S	SSE	S	SSE	SSW	W	WSW	SW	WSW	WSW	WSW	SSW
14	WSW	SSE	ENE	SSE	SSE	SW	WSW	W	WNW	W	SSW	SSW	SW
15	SSW	SE	SE	SSW	SSE	WNW	WSW	W	WNW	W	W	S	SW
16	WSW	SW	W	ENE	W	SSE	S	SSW	S	SSW	WSW	WSW	SW
17	W	W	WSW	SE	WSW	WSW	WSW	W	WSW	W	W	W	W
18	W	W	WSW	W	W	WSW	W	W	W	WSW	W	WSW	W
19	WSW	W	W	W	W	W	W	WNW	WSW	SSW	WSW	WSW	W
20	WSW	SW	SW	SSW	SSE	SSW	SSE	SSE	SSE	S	SSW	SW	SSW
21	WSW	SSE	S	SSE	SSE	S	WSW	SSW	S	SSW	SW	SSE	S
22	SSW	SW	SE	SSE	WSW	SSW	S	S	W	SW	SE	SSW	SSW
23	SSE	SSE	SSE	SSE	SSE	S	S	SSW	SSW	SSW	SSW	SW	S
24	SSW	SSE	S	SSE	WSW	WSW	SSW	SSW	SSW	SSW	S	WSW	SSW
25	WSW	WSW	WSW	WSW	WSW	W	W	W	W	WSW	W	WSW	WSW
26	W	W	W	W	W	W	WSW	W	W	W	W	W	W
27	W	W	W	W	W	W	WSW	WSW	W	W	W	WSW	W
28	WSW	WSW	WSW	WSW	W	W	WSW	W	W	W	W	W	W
29	W	W	W	W	W	WSW	W	W	W	W	W	W	W
30	W	W	W	W	W	W	W	W	W	WSW	WSW	SW	W
Mean direction.	SW	SW	SW	SSW	SW	SW	SW	WSW	WSW	SW	SW	SW	SW

*Derived from 24 hourly directions.

The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

JULY.

Date.	Hours.												*Mean direction
	0	2	4	6	8	10	12	14	16	18	20	22	
1	WSW	SW	WSW	W	W	SW	SSW	W	WSW	SW	SSW	SSW	SW
2	SSW	SSW	W	SSE	WSW	S	SSE	SW	WSW	SW	SW	SSW	SSW
3	SW	SW	SW	SW	WSW	WSW	WSW	SW	W	WNW	WSW	SW	WSW
4	WSW	W	WSW	W	W	W	W	W	W	WSW	W	SW	W
5	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	SW	SW	WSW
6	WSW	SW	SW	WSW	WSW	WSW	WSW	W	WSW	W	W	W	WSW
7	W	W	W	W	W	W	W	W	W	W	WSW	WSW	W
8	W	W	W	W	W	W	W	W	W	W	W	W	W
9	WSW	W	W	W	WSW	W	W	W	W	W	WSW	WSW	W
10	WSW	W	W	W	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
11	WSW	SW	W	SSW	WSW	WSW	WSW	W	W	WSW	WSW	WSW	WSW
12	W	SW	SSW	SSW	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW
13	WSW	SSW	WSW	WSW	WSW	SSW	W	WSW	W	WSW	WSW	WSW	WSW
14	WSW	W	W	W	W	W	WSW	WSW	SW	W	W	W	W
15	WSW	WSW	W	W	W	WSW	WSW	W	SW	SSW	WSW	WSW	WSW
16	SW	SW	W	SW	SW	WSW	SW	SW	SW	WSW	WSW	SW	SW
17	SSW	WSW	WSW	SSW	SW	SSW	WSW	WSW	SSW	W	SSW	SSW	SW
18	SW	SW	SW	SSW	W	WSW	WSW	WSW	WSW	WSW	WSW	S	SW
19	SSW	S	W	W	W	WSW	WSW	SSW	SSW	WSW	SW	WSW	SW
20	SW	WSW	WSW	WSW	W	W	W	WSW	SW	SW	SW	SW	WSW
21	W	W	WSW	W	W	WSW	SW	W	W	W	W	W	W
22	W	W	W	W	W	W	W	W	W	W	W	W	W
23	W	W	W	W	W	WNW	WSW	W	WSW	W	W	W	W
24	WSW	W	W	W	W	W	WSW	WSW	W	W	W	W	W
25	W	W	W	W	WSW	W	WSW	W	WSW	W	W	WSW	W
26	W	WSW	W	W	W	W	W	W	W	W	WSW	WSW	W
27	W	W	W	W	W	W	W	W	W	W	W	W	W
28	W	W	W	W	W	W	W	W	W	W	W	W	W
29	W	W	W	W	W	W	WSW	W	W	W	W	W	W
30	W	WSW	WSW	W	WSW	WSW	W	W	W	W	W	WSW	W
31	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	WSW
Mean direction.	WSW	WSW	W	WSW	W	WSW	WSW	W	WSW.	W	WSW	WSW	WSW

AUGUST.

1	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW
2	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	WSW
3	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	W	WSW	WSW
4	W	W	W	W	W	W	W	W	W	WSW	W	WSW	W
5	WSW	W	WSW	SSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
6	WSW	WSW	WSW	WSW	WSW	W	W	W	WSW	W	WSW	WSW	WSW
7	WSW	WSW	W	W	W	W	WNW	W	W	W	W	WSW	W
8	W	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW
9	WSW	WSW	SW	WSW	W	WSW	WSW	WSW	SSW	SW	SW	SW	WSW
10	SW	WSW	WSW	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW
11	WSW	W	WSW	W	W	W	W	W	W	WSW	W	WSW	W
12	W	W	WSW	W	W	W	W	W	W	W	W	W	W
13	W	W	WSW	W	W	W	W	W	W	WSW	WSW	WSW	W
14	WSW	WSW	W	WSW	W	W	W	W	WSW	WSW	WSW	W	WSW
15	W	W	W	WSW	W	W	W	W	W	W	W	W	W
16	W	W	W	W	W	W	W	W	W	W	W	WSW	W
17	W	WSW	W	W	W	W	W	W	W	W	WSW	W	W
18	W	W	W	W	W	WSW	W	W	W	W	W	W	W
19	W	W	W	W	W	W	W	W	W	W	W	W	W
20	W	W	WSW	W	W	W	WSW	W	W	W	W	W	W
21	W	W	W	W	W	W	W	W	W	W	W	W	W
22	W	W	WSW	W	W	W	W	W	W	W	WSW	W	W
23	W	W	W	W	W	WSW	W	W	W	W	W	W	W
24	W	W	WSW	WNW	W	W	W	W	W	W	W	W	W
25	W	W	W	W	WSW	WSW	W	W	W	WSW	WSW	WNW	W
26	SSW	SW	SSW	SW	SW	W	W	W	W	WSW	WSW	SSW	WSW
27	SSW	SW	SW	SW	W	SSW	W	SW	SSW	SSW	SSW	S	SW
28	S	SSW	WSW	W	SSW	WSW	WSW	W	SW	W	NW	S	WSW
29	SSE	SSE	SSE	SE	SSE	S	SSW	WSW	WSW	WNW	WNW	WSW	SSW
30	WSW	WSW	WSW	W	WSW	WSW	W	WSW	W	W	WSW	WSW	W
31	W	W	W	W	W	W	W	W	W	W	W	W	W
Mean direction.	WSW	W	WSW	W	W	W	W	W	W	W	W	WSW	W

*Derived from 24 hourly directions.

The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

SEPTEMBER.

Date.	Hours.												*Mean direction
	0	2	4	6	8	10	12	14	16	18	20	22	
1	W	W	W	W	W	W	W	WNW	W	W	W	W	W
2	WNW	W	W	W	W	W	W	W	W	W	W	W	W
3	W	W	W	W	W	WSW	WNW	W	SW	NW	W	W	W
4	W	W	W	W	W	W	W	W	W	WNW	W	W	W
5	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	SW	SW	WSW
6	SSW	SW	SW	SW	SSW	SW	SW	WSW	SW	SW	SSW	SSW	SW
7	SSW	SSW	SW	SSW	SW	SSW	SW	WSW	W	WSW	WSW	SW	SW
8	SW	SW	SSW	SSW	W	SSW	W	SW	WSW	WSW	W	SSW	WSW
9	W	SW	W	WSW	WSW	SW	SW	SW	WSW	SW	SSW	SSW	SW
10	SW	SSW	SW	SSE	SE	SE	W	SW	WSW	SW	SW	W	SSW
11	WSW	SSW	SSW	ESE	ESE	ENE	WNW	WNW	WNW	W	W	W	WSW
12	W	WSW	W	W	W	WSW	W	W	W	W	W	W	W
13	WSW	WSW	WSW	W	W	W	W	W	W	W	W	W	W
14	WNW	WNW	W	W	W	W	W	WNW	WNW	WNW	W	W	W
15	W	W	W	WSW	W	WNW	WNW	WNW	W	WNW	WNW	W	W
16	W	W	W	W	W	W	WNW	W	W	W	W	WSW	W
17	WSW	WSW	W	SW	WSW	W	W	W	WNW	W	WSW	W	W
18	W	W	W	W	W	W	W	W	WSW	WSW	W	W	W
19	W	W	W	W	W	W	W	W	W	W	W	WSW	W
20	W	W	W	WNW	W	W	W	WNW	WNW	W	W	W	W
21	WNW	NW	W	W	W	W	WSW	WSW	WSW	WSW	W	W	W
22	WNW	WNW	WNW	SSE	ESE	ESE	SE	WNW	WNW	WNW	SSW	SSE	SE
23	SSE	SSE	SE	SSE	SE	WSW	WNW	NW	WNW	W	WSW	WSW	S
24	WSW	WSW	ESE	ESE	SE	S	W	W	WNW	WNW	WNW	WNW	WSW
25	WNW	WNW	SSE	SSE	SE	SE	WNW	WNW	WNW	NW	NW	NW	WNW
26	NNW	NNW	NNE	E	ESE	NNW	NW	WNW	WNW	NW	NNW	NNW	NW
27	NNW	NNW	NNW	NNW	NNW	NNW	WNW	WNW	WNW	NW	NW	NW	NW
28	NW	ESE	NNE	ENE	E	E	WNW	WNW	NW	NW	NNW	NNW	NNW
29	NNE	NNW	NNE	NNE	ENE	NNW	NW	NW	NW	NW	NNW	NNW	NNW
30	NNE	NNE	NNE	ENE	E	E	NW	WNW	NW	NW	NNW	NNW	NNW
Mean direction.	W	W	W	WSW	WSW	WSW	W	W	W	W	W	W	W

OCTOBER.

1	NNW	NNW	NNE	NNE	ENE	WNW	WNW	NW	NW	NW	NNW	NNW	NNW
2	NNW	NNW	NNW	ENE	ENE	WNW	NW	NW	NW	NNW	S	ESE	NNW
3	SSE	SSE	E	E	ENE	ENE	NW	NW	NNW	NNW	NNW	NNE	N
4	NNW	NNW	NNW	ENE	ESE	ESE	WNW	WNW	NW	NNW	NNW	NNW	NNW
5	NNW	NNW	NNW	NNW	ENE	ENE	WNW	NW	NW	NNW	NNW	NNW	NNW
6	NNW	NNW	NNW	N	N	NNW	NW	NW	NNW	NNW	N	NNW	NNW
7	NNW	NNW	NNW	N	NNW	NW	NW	NW	NW	NNW	NW	NW	NW
8	NW	NNW	NNW	N	N	WSW	W	W	WNW	WNW	WNW	SW	WNW
9	SSW	SE	SE	SE	ESE	ESE	WSW	WSW	W	W	W	SSE	SSE
10	ESE	ENE	ENE	ESE	ESE	ESE	WNW	WNW	NW	NNW	NNE	E	ENE
11	ESE	ENE	E	E	ESE	ENE	E	E	NW	NNW	NE	ESE	ENE
12	SE	SE	ENE	ENE	ENE	ENE	NW	NW	NW	NW	NNW	NNE	NNE
13	ENE	ENE	ENE	ENE	ENE	ENE	WNW	WNW	WNW	WNW	NNW	ESE	NNE
14	ENE	ENE	ENE	NE	ENE	ENE	WNW	WNW	WNW	NW	N	ENE	N
15	E	ENE	E	E	ESE	ESE	WNW	NW	NW	NW	NNW	NNE	NNE
16	ENE	ENE	NE	NE	ENE	ENE	ENE	WNW	NW	NNW	N	N	NNE
17	N	ENE	ENE	NE	E	ENE	NW	NW	NW	NNW	NNE	NNE	NNE
18	E	ENE	ENE	E	E	E	E	NW	NNW	NNW	N	ENE	N
19	ENE	ENE	ENE	ENE	E	ENE	ENE	NW	NW	NNW	NNW	NNW	NNE
20	NNW	NNE	NE	ENE	NNE	ENE	NW	WSW	W	NW	NW	NW	N
21	SE	SE	SE	E	E	E	NW	NW	NW	NNW	NNW	NNE	NE
22	NNE	SE	ESE	ENE	ENE	E	E	WNW	WNW	WNW	NNW	NNE	NE
23	ESE	ESE	ENE	ENE	ENE	ESE	ESE	WNW	WNW	NW	NNE	E	ENE
24	E	E	NNE	ENE	E	E	E	WNW	WNW	NW	NNW	NNW	NE
25	ESE	ENE	E	E	E	ENE	ENE	WNW	NW	NW	NNW	NNW	NE
26	NNE	E	ENE	NE	E	E	E	WNW	NW	NW	NNW	N	NNE
27	ENE	ENE	ENE	ENE	ENE	ENE	WNW	WNW	NW	NNW	NNW	ENE	NNE
28	ESE	E	ENE	ENE	E	E	NW	NW	NW	NNW	NNW	ENE	NNE
29	E	E	ENE	SE	E	SE	W	WNW	NNW	NNW	N	ENE	NE
30	NNW	ESE	E	E	E	E	W	NW	NNW	NNW	NNE	N	NNE
31	NNE	NE	ENE	ENE	ENE	ENE	SSE	WNW	WNW	ESE	SE	ENE	E
Mean direction.	ENE	ENE	ENE	ENE	ENE	ENE	NW	WNW	NW	NNW	N	NE	NNE

*Derived from 24 hourly directions.

The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

NOVEMBER.

Date.	Hours.												*Mean direction
	0	2	4	6	8	10	12	14	16	18	20	22	
1	ENE	NNE	ENE	ENE	E	ESE	ESE	WNW	WNW	NW	NNW	NNE	NE
2	NNE	ENE	ENE	ESE	ESE	ENE	ENE	NW	NW	NW	NNW	NNW	NE
3	NE	ESE	ESE	ESE	E	ENE	ENE	NW	NNW	NNW	NNE	NNE	NE
4	E	ENE	NE	ENE	ENE	ENE	WNW	WNW	NW	NW	NNW	N	NNE
5	ESE	E	ENE	ENE	ENE	ENE	ENE	NW	NW	NNW	N	ESE	NE
6	ESE	ESE	ESE	ESE	ESE	ESE	ENE	E	ENE	ENE	NNE	ENE	E
7	ENE	NE	NE	ENE	E	ESE	WNW	W	WNW	NW	N	ESE	ENE
8	E	E	ENE	NNE	ENE	E	W	WNW	NW	NNW	N	N	N
9	N	N	NNE	NNE	ENE	ENE	WNW	NW	NNW	NNW	NNE	E	N
10	ENE	ENE	ENE	ENE	ESE	ESE	ESE	W	W	WNW	NNW	NE	NE
11	ENE	ESE	ESE	ESE	SE	SE	SE	W	W	WNW	NNW	NNW	ESE
12	NE	ENE	NE	ENE	ENE	E	W	WNW	NW	NNW	NNW	NNE	N
13	E	NNW	NNE	ENE	ENE	E	WNW	NW	NW	NNW	N	NNE	N
14	NNE	NNE	E	ENE	ENE	ENE	E	NW	NW	NNW	NNE	NNE	NNE
15	NE	ENE	ENE	E	E	ESE	SE	SSE	NW	NNW	NNW	NE	ENE
16	NE	NNE	ENE	ENE	ESE	ESE	ESE	WNW	NW	NNW	NNW	NE	NNE
17	NE	NE	ENE	E	E	ENE	ENE	WNW	NW	NNW	NNW	NNE	NNE
18	NNE	ENE	ENE	ENE	E	E	ENE	S	WNW	NNW	NNW	NNE	NE
19	E	ENE	ENE	ENE	ENE	ENE	ENE	NNE	NW	NNW	N	NNE	NE
20	NNE	ENE	ENE	ENE	E	E	ENE	ENE	NNW	NNW	N	ENE	NE
21	ESE	ESE	ESE	NE	ENE	E	E	WNW	NW	NNW	N	NNE	NNE
22	E	E	E	E	ENE	ENE	WNW	NW	NW	NNW	NNE	NNE	NE
23	NNE	ENE	ENE	ENE	ENE	ENE	ENE	NW	NNW	NNW	NNW	N	NNE
24	N	ESE	ESE	ENE	E	E	ESE	WNW	NW	NW	NNW	NNE	N
25	NNE	N	N	ENE	ENE	E	WNW	NW	NW	NNE	NNE	NNW	N
26	NNE	SSE	S	ESE	ESE	ESE	E	ENE	NNW	N	N	ENE	NE
27	ENE	ENE	ENE	ENE	ENE	ENE	E	WNW	NNW	NNW	NNW	NNE	NE
28	ENE	ESE	E	ENE	ENE	ENE	ENE	NW	NNW	NNW	NNW	NNE	N
29	NNE	ENE	ENE	ENE	ENE	ENE	ENE	NW	NNW	NNW	N	NNE	NE
30	NNE	E	ENE	E	ESE	ESE	ENE	WNW	NW	NNW	NNW	N	NE
Mean direction.	ENE	ENE	ENE	E	E	E	ENE	NW	NW	NNW	N	NE	NE

DECEMBER.

1	ESE	ENE	ENE	E	ENE	ESE	E	ENE	ENE	NNW	N	ENE	ENE
2	ESE	ESE	ESE	ESE	ESE	E	ENE	NNW	NNW	NNW	N	NNE	ENE
3	NNE	E	E	E	E	E	ENE	WNW	NNW	NNW	N	N	NE
4	NNE	NE	NE	ENE	E	E	NW	WNW	WNW	NNW	N	NNE	NNE
5	ENE	E	E	E	ENE	ENE	NW	NNW	NNW	NNW	NNW	N	NNE
6	N	SE	SE	E	E	E	E	W	W	W	NW	NE	E
7	ESE	ESE	ESE	E	E	E	WNW	NW	NNW	NNW	N	NNE	NNE
8	NNE	ESE	ENE	E	ENE	ENE	ENE	WNW	NW	NNW	NNW	N	NNE
9	N	ENE	ESE	ENE	NE	N	NW	NW	NW	NW	NNW	NNW	NNW
10	NE	NE	ENE	ENE	ENE	ENE	WNW	WNW	NW	NW	NW	NW	N
11	NW	ENE	E	ESE	ESE	SE	W	W	W	WNW	NW	NW	NNE
12	NW	SE	SE	SE	SE	ESE	WSW	WSW	SW	SW	WSW	W	SSE
13	W	WNW	SSW	SSW	SE	SSE	NW	WNW	WNW	NW	NNW	NNW	WNW
14	NNE	E	NE	NE	NE	ENE	ENE	NNW	NNW	NNW	N	NNE	NNE
15	NNE	NNE	NNE	ENE	ENE	ENE	ENE	NW	NNW	NNW	NNW	NNE	N
16	NNE	ESE	ENE	E	ENE	E	E	WNW	NW	NNW	NNW	NNE	NE
17	NNE	NE	ENE	NE	ENE	ENE	NW	NW	NNW	NNW	N	NNE	N
18	NNE	NNE	NE	ENE	ENE	ENE	WNW	NW	NW	NNW	N	NNE	N
19	ENE	ESE	E	E	E	E	E	E	WNW	WNW	NW	NE	ENE
20	ESE	ENE	ENE	ENE	ENE	ENE	NW	NNW	NNW	NNW	NNW	NE	N
21	NE	NE	NNE	NE	ENE	ENE	NW	NW	NW	NNW	NNW	ENE	N
22	ENE	ENE	ENE	ENE	ESE	ESE	WNW	WNW	NW	NW	WNW	WNW	NNW
23	WNW	WNW	SSE	SE	SE	ENE	NW	NNW	NNW	NNW	N	NNE	N
24	NNE	NNE	ENE	ENE	ENE	ENE	NW	NW	NNW	N	N	N	N
25	N	NNE	NE	NE	ENE	ENE	NE	NNW	NNW	N	N	NE	NNE
26	ENE	ENE	ENE	ENE	ENE	NE	ENE	NW	NW	NNW	NNW	ENE	NE
27	ESE	E	E	ENE	ENE	ENE	ENE	NW	NW	NNW	NNW	NNE	NE
28	NNE	ENE	ENE	ENE	ENE	ENE	ENE	WNW	NW	NNW	N	N	NNE
29	N	ESE	E	ENE	E	ENE	ENE	NW	NNW	NNW	N	NNE	NE
30	NNE	E	E	ENE	ENE	ENE	ENE	NW	NW	NNW	N	NNE	NNE
31	NNE	ENE	E	ENE	ENE	ESE	NW	NNW	NNW	N	N	N	NNE
Mean direction.	NE	ENE	E	E	E	E	N	NW	NW	NNW	NNW	NNE	NNE

*Derived from 24 hourly directions.

The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

JANUARY. (IN DEGREES FAHRENHEIT.)

Date.	Hours.												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	71·7	71·5	71·2	71·0	71·1	74·2	76·4	77·9	76·2	74·1	72·2	71·1	73 2	13 18	78·3	24 0	69·2
2	69·2	67·8	65·9	65·7	65·8	71·1	74·9	76·7	75·5	72·7	71·8	70·1	70·5	14 19	76·9	7 13	64·8
3	68·0	66·1	63·6	62·2	64·7	70·1	78·2	78·3	76·6	74·0	72·7	70·2	70·3	12 0	78·4	6 34	**61·1**
4	67·5	68·1	70·2	70·3	71·6	77·3	83·9	87·2	87·2	77·2	76·0	75·1	76·0	15 13	**89·2**	0 38	67·1
5	73·7	73·9	73·9	72·3	74·2	78·1	82·7	84·1	83·3	79·6	77·8	76·5	**77·5**	13 43	84·3	6 24	72·2
6	75·6	74·6	73·9	73·9	74·2	77·8	81·3	83·0	82·6	79·1	77·7	76·2	77·4	14 29	83·3	4 22	73·5
7	75·9	75·2	75·2	74·4	74·2	77·2	81·0	81·6	80·9	77·8	76·6	75·8	77·0	14 36	81·8	7 23	74·0
8	73·8	73·4	72·7	72·5	72·9	76·6	78·6	80·1	77·9	74·4	73·9	72·3	74·8	14 32	80·3	5 13	72·2
9	70·4	69·5	68·8	68·9	70·9	76·3	79·4	79·4	78·9	77·1	76·1	74·8	74·3	12 32	80·3	4 22	68·7
10	73·6	72·7	72·0	71·2	72·9	79·6	81·1	81·0	79·7	77·5	76·8	76·0	76·2	11 26	82·6	5 44	71·0
11	74·6	74·0	73·0	73·2	73·9	77·8	84·0	84·3	78·9	76·7	76·6	75·3	76·9	13 28	86·5	4 14	72·4
12	73·9	73·6	73·2	72·8	73·7	78·7	83·0	84·4	83·1	78·2	76·1	75·2	77·1	13 53	85·4	0 53	72·4
13	74·0	72·2	72·1	72·1	73·1	78·7	85·3	83·1	81·4	77·9	76·4	75·9	76·6	12 14	85·8	5 8	70·8
14	73·1	72·4	72·5	70·8	72·4	76·2	80·1	79·4	78·6	76·5	76·1	74·1	75·1	12 53	80·4	6 54	69·5
15	72·7	71·0	70·4	69·7	71·1	76·2	78·6	80·3	78·8	75·9	75·5	74·8	74·6	13 28	80·7	6 48	68·7
16	72·9	72·1	70·8	70·0	72·2	77·5	82·5	84·2	82·0	78·2	75·7	74·4	76·0	13 13	85·0	5 30	69·9
17	73·9	74·0	71·4	70·6	72·4	76·8	82·5	83·7	81·0	77·9	75·6	73·7	76·0	13 13	84·0	5 59	70·3
18	72·6	72·1	71·2	69·3	70·6	75·5	78·1	79·7	79·3	76·7	75·9	74·6	74·6	14 10	80·0	7 13	68·8
19	72·5	71·0	72·2	71·7	71·3	74·3	77·8	78·7	77·6	75·0	74·5	73·8	74·1	14 4	79·0	2 4	70·3
20	71·8	71·1	70·4	70·5	70·8	75·0	76·9	76·8	75·6	73·0	72·4	69·9	72·8	12 15	77·6	7 28	69·3
21	69·5	71·5	70·8	69·8	70·7	74·1	76·2	77·2	75·0	72·4	71·5	69·5	72·2	13 13	77·3	23 54	67·2
22	66·7	65·5	66·2	65·2	65·5	71·6	74·3	76·3	75·5	72·8	72·4	69·6	**70·1**	14 4	76·7	6 58	64·1
23	67·7	66·5	64·9	64·7	68·2	74·2	81·3	82·8	80·3	76·5	74·5	73·2	72·9	13 23	85·4	7 14	64·4
24	69·4	68·2	66·8	66·7	70·0	75·6	82·6	82·2	80·6	76·8	74·9	73·4	73·9	13 33	82·9	6 48	65·9
25	71·8	71·0	69·4	68·3	70·1	75·5	81·1	82·0	80·0	76·3	75·3	73·2	74·4	14 4	82·1	6 40	67·1
26	72·5	72·1	71·3	70·0	71·0	75·7	79·7	81·2	80·2	77·2	75·5	72·6	75·0	14 38	81·9	7 18	69·5
27	72·6	72·0	70·7	69·1	71·3	75·7	79·4	80·9	79·7	76·0	74·8	72·6	74·5	13 54	81·7	5 55	68·9
28	71·0	71·6	69·7	68·9	71·0	76·4	78·2	78·7	78·7	75·3	74·4	73·6	73·9	15 13	79·3	6 58	68·4
29	72·3	72·2	70·1	69·5	69·6	75·6	79·2	79·2	78·3	75·1	74·1	72·8	74·0	12 58	79·8	7 8	68·3
30	71·0	69·3	68·0	66·5	68·1	75·4	78·5	79·8	78·6	75·5	74·3	72·5	73·1	14 12	80·0	6 58	65·9
31	71·3	71·5	69·0	69·0	69·3	75·5	78·7	80·1	79·3	76·1	74·9	72·9	74·0	12 58	80·7	7 18	67·5
Mean.	71·8	71·2	70·4	69·7	70·9	75·8	79·9	80·8	79·4	76·1	74·9	73·4	74·5				

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1	71·1	70·7	70·3	70·5	72·4	78·2	83·5	85·0	83·0	79·3	77·3	74·9	76·4	14 2	85·0†	4 12	70·0
2	74·3	72·4	73·7	71·0	72·6	76·1	79·4	79·0	77·0	74·6	72·9	71·2	74·5	12 40	80·1	7 35	70·9
3	72·6	74·1	73·2	70·9	71·5	75·1	76·6	77·3	77·3	72·9	72·3	69·8	73·5	15 56	78·5	23 18	**69·4**
4	69·2	67·4	65·7	**64·2**	66·3	73·1	79·0	78·1	76·7	74·1	73·7	72·3	**71·7**	12 17	79·8	6 0	**64·2**
5	70·0	68·9	68·8	68·0	70·0	75·1	83·1	82·9	79·9	76·2	74·9	73·5	74·2	12 35	84·4	1 8	67·8
6	70·7	70·3	69·5	69·8	71·0	77·5	85·5	88·0	82·9	77·9	76·2	74·4	76·1	13 38	**89·0**	4 9	69·0
7	72·7	71·8	69·8	70·0	71·5	77·0	84·2	84·1	83·3	78·5	75·2	73·0	75·8	13 13	87·6	4 30	68·7
8	72·1	71·2	70·1	70·4	71·0	76·2	81·9	82·3	80·4	77·1	75·2	73·2	75·1	11 44	83·0	6 48	70·0
9	71·5	69·7	69·5	68·9	70·9	76·9	79·0	79·4	78·8	75·6	75·3	73·3	74·1	13 28	80·4	6 43	67·7
10	72·4	70·7	70·0	69·3	70·7	75·1	77·7	79·9	78·7	75·5	74·5	73·0	73·9	14 48	80·2	6 58	67·8
11	72·7	71·8	71·0	69·4	71·5	76·1	81·9	83·7	82·6	78·4	75·4	74·9	75·7	14 0	84·2	6 28	68·8
12	74·7	73·2	72·4	71·3	73·2	76·4	80·4	81·8	81·7	77·5	75·6	74·7	75·9	15 43	82·2	5 33	71·0
13	73·9	72·3	71·3	70·2	72·4	77·1	79·0	81·5	81·1	77·9	76·0	74·7	75·6	14 38	83·0	6 48	70·0
14	74·6	73·5	73·8	72·4	74·4	77·6	80·2	81·8	81·9	78·2	76·8	76·2	76·8	14 24	82·8	5 43	72·2
15	75·7	75·0	74·1	73·6	75·1	79·5	79·8	79·8	78·9	76·5	76·5	75·8	76·7	12 42	80·7	5 13	73·4
16	75·3	75·1	74·6	74·2	74·9	77·9	79·0	79·0	78·7	76·6	76·3	76·2	76·5	12 42	80·7	6 58	73·7
17	76·2	75·2	75·0	74·1	74·9	77·9	80·1	81·0	80·4	76·6	75·8	74·6	76·7	14 6	82·1	7 3	73·5
18	74·9	74·0	74·7	74·2	75·6	78·4	80·1	80·6	79·2	76·5	75·5	74·9	76·6	12 53	80·9	2 2	74·0
19	74·9	74·5	72·9	72·3	73·6	78·4	81·1	80·8	79·2	76·8	77·5	76·8	76·6	12 58	82·3	6 43	71·7
20	76·0	76·6	74·9	74·2	76·6	80·6	84·1	83·7	80·1	78·8	78·2	75·6	**78·3**	12 28	84·5	7 0	73·6
21	74·6	74·6	74·6	72·9	74·6	79·7	81·7	82·6	81·8	79·1	77·9	76·2	77·5	14 40	84·2	7 3	71·3
22	74·6	73·6	71·7	71·3	74·6	79·2	82·6	84·0	82·0	78·5	77·9	75·2	77·2	14 4	84·2	5 3	71·0
23	76·2	74·7	73·5	71·4	74·2	78·6	81·1	82·5	82·2	78·5	76·8	75·3	77·1	13 24	83·3	6 53	70·9
24	76·7	75·6	73·8	73·2	75·0	80·0	83·0	81·4	80·4	78·5	78·4	77·3	77·7	11 54	83·6	6 38	73·0
25	76·3	75·1	74·2	73·5	74·7	77·9	80·7	80·3	79·4	77·2	76·7	76·1	76·8	12 8	81·4	6 38	73·0
26	76·1	74·9	74·3	73·3	74·7	78·1	80·2	81·2	79·6	76·4	75·5	74·9	76·5	14 2	81·2	6 48	72·8
27	73·5	73·5	72·6	73·2	74·9	77·7	79·6	80·3	81·0	77·5	75·9	75·4	76·3	15 58	81·9	4 12	72·5
28	75·2	74·7	73 6	73·2	74·5	78·1	80·8	82·1	81·8	78·1	76·8	75·8	77·0	14 14	83·0	6 53	72·5
Mean.	73·9	73·0	72·3	71·5	73·1	77·5	80·9	81·6	80·4	77·1	76·0	74·6	76·0				

*Derived from 24 hourly values.

†The highest hourly value given, the curve being lost near about the maximum point.

MARCH. (IN DEGREES FAHRENHEIT.)

Date	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
														H. M.		H. M.	
1	74·8	76·1	75·0	72·5	76·0	79·7	86·8	86·5	83·6	80·0	79·1	77·8	79·0	12 44	88·1	6 58	72·1
2	77·4	76·6	76·1	73·9	76·0	82·2	85·9	84·5	81·2	78·0	77·3	75·9	78·7	11 30	87·1	6 18	73·5
3	75·3	74·2	72·4	73·3	76·0	79·8	81·3	82·1	81·9	78·6	76·4	75·4	77·2	15 3	82·6	4 9	72·0
4	75·1	74·9	74·6	73·8	75·2	77·1	78·8	79·9	79·4	75·3	73·3	70·9	75·6	13 48	80·7	22 40	70·7
5	71·5	69·9	69·2	69·7	72·2	76·1	78·2	80·7	79·4	76·7	75·9	73·4	**74·4**	14 28	81·7	4 24	69·1
6	71·7	70·6	70·2	69·9	71·8	77·8	80·4	81·0	80·8	78·6	77·8	75·9	75·5	13 23	82·1	6 38	**68·3**
7	73·5	72·0	70·3	70·6	75·0	81·0	89·7	86·7	83·8	81·1	80·1	77·8	78·3	12 9	90·6	4 28	70·1
8	76·9	74·1	73·5	72·1	77·4	84·2	93·0	89·9	85·2	81·6	79·8	78·4	80·6	13 13	**97·3**	6 24	72·0
9	75·9	75·2	73·3	73·2	76·4	84·7	87·1	87·5	83·9	81·1	79·5	77·0	79·5	13 13	89·1	4 30	72·8
10	75·8	74·6	73·9	73·5	76·5	82·1	84·1	85·2	85·1	80·8	78·4	78·2	79·1	15 0	87·2	5 23	71·8
11	77·6	76·3	75·8	74·7	76·1	80·6	84·4	84·7	83·8	80·8	78·8	77·0	79·2	12 48	86·7	6 48	73·3
12	76·2	77·1	76·1	75·2	77·5	84·1	85·3	87·2	85·1	82·2	82·1	80·0	80·6	13 23	88·1	6 54	74·2
13	79·6	78·4	77·5	76·4	79·5	84·1	84·4	85·5	84·7	82·5	81·3	79·6	81·0	13 44	86·7	6 43	75·8
14	79·8	78·3	78·2	75·8	79·5	83·7	85·0	84·7	84·4	82·7	81·4	80·0	**81·1**	12 43	85·5	6 36	75·5
15	79·2	77·7	77·4	75·6	78·6	82·3	83·0	84·0	83·2	80·1	79·4	78·4	79·8	13 38	84·4	6 40	74·8
16	78·1	76·2	74·2	73·4	76·9	80·4	83·3	85·4	84·2	80·7	78·5	77·6	79·0	14 12	86·1	6 24	72·9
17	76·5	76·8	75·1	74·7	76·8	80·3	84·2	84·1	84·0	81·2	78·8	76·9	79·1	14 43	85·3	5 28	74·1
18	75·8	75·1	75·3	74·2	76·8	80·1	84·2	84·9	82·2	79·4	78·2	77·2	78·7	13 30	85·5	6 33	74·1
19	76·9	76·6	75·7	74·4	76·8	80·1	82·8	82·3	82·9	80·4	79·6	78·7	78·9	15 0	84·2	5 0	74·4
20	77·5	76·8	74·5	73·9	77·9	82·9	84·3	85·0	83·4	80·1	79·3	78·6	79·5	13 48	85·8	5 55	73·6
21	77·8	77·1	75·4	74·6	78·0	82·5	84·1	85·4	84·7	80·7	79·3	78·1	79·8	13 40	86·5	6 2	74·6
22	77·8	77·1	76·1	75·4	77·9	81·1	85·2	85·5	83·8	80·8	79·4	79·2	79·9	14 18	85·7	4 58	75·2
23	78·7	77·5	76·3	75·7	79·0	83·0	85·3	84·6	82·9	80·5	79·8	79·1	80·2	12 45	86·3	4 58	75·5
24	78·6	77·9	76·2	75·9	79·7	82·6	84·2	84·6	82·6	80·7	79·8	79·1	80·1	12 12	85·0	4 40	75·3
25	78·6	78·5	77·9	77·7	80·1	82·2	85·0	85·3	83·4	80·2	79·1	78·8	80·5	14 35	86·6	4 58	77·5
26	78·1	76·7	75·7	75·4	77·9	80·7	83·3	84·3	83·1	79·7	78·3	77·7	79·2	14 53	84·8	5 33	75·2
27	77·1	76·7	75·7	74·9	77·4	80·2	82·9	83·2	82·5	79·2	78·0	77·8	78·8	14 9	84·5	6 14	74·6
28	76·7	75·2	74·7	74·3	77·4	80·9	83·3	83·5	82·3	79·6	78·1	77·6	78·7	13 8	85·0	6 24	74·0
29	77·3	77·4	75·7	74·8	77·5	81·6	83·3	83·3	82·8	79·4	77·5	77·3	79·0	12 40	84·2	6 0	74·4
30	76·9	76·0	75·3	73·5	77·3	80·4	82·6	83·3	82·1	78·8	76·4	75·4	78·1	14 4	84·1	6 0	73·3
31	73·9	72·9	72·7	72·1	76·4	79·4	81·5	82·7	82·2	79·3	77·5	76·2	77·3	13 30	84·1	5 13	72·0
Mean.	76·7	75·8	74·8	74·0	77·0	81·2	84·1	84·4	83·1	80·0	78·7	77·5	78·9				

APRIL.

1	75·9	75·4	73·9	73·0	76·1	80·4	82·9	84·8	83·5	80·1	78·6	78·1	**78·5**	14 9	85·0	5 18	**72·7**
2	77·7	75·6	75·5	74·7	78·5	85·0	85·5	86·5	84·8	81·8	80·4	79·4	80·5	13 40	87·3	6 19	74·4
3	79·2	77·4	76·8	76·1	79·3	82·8	85·5	84·3	83·2	80·7	79·5	79·1	80·3	11 48	86·3	6 28	75·7
4	78·6	78·2	77·1	76·4	80·7	82·5	83·4	83·4	82·3	80·8	79·7	79·3	80·2	13 48	84·6	5 28	76·0
5	78·8	78·3	77·2	76·1	79·2	82·7	85·6	86·1	86·0	82·6	80·6	80·1	81·0	14 48	87·8	5 48	76·0
6	79·5	78·3	77·6	76·7	79·9	82·8	85·1	86·2	85·3	82·1	80·9	80·1	81·2	14 24	86·7	5 48	76·6
7	79·1	78·8	78·3	77·1	79·9	82·3	84·8	84·1	84·0	81·2	80·2	80·1	80·9	13 30	86·1	5 43	77·0
8	79·1	78·5	77·5	77·4	80·5	84·2	86·2	85·7	85·2	83·3	82·1	80·8	81·7	15 13	87·3	5 48	77·2
9	78·8	77·8	77·9	78·1	81·3	84·1	85·7	86·5	85·7	81·9	80·6	80·1	81·6	14 33	87·4	2 48	77·4
10	79·4	78·7	77·6	75·5	79·3	83·2	85·3	86·9	86·7	82·5	80·3	79·9	81·3	14 31	87·9	6 14	75·4
11	78·8	78·1	77·0	76·1	79·2	82·7	84·2	85·6	84·2	81·6	80·1	79·3	80·6	13 58	86·0	6 2	76·1
12	78·8	78·8	77·5	77·2	80·5	84·5	87·5	85·8	85·0	82·4	80·6	80·4	81·5	11 43	87·5	6 4	76·7
13	80·7	79·7	78·6	78·5	81·9	84·9	86·6	88·3	86·1	83·6	83·2	82·6	83·0	14 0	88·3	6 0	77·3
14	82·3	81·9	81·6	80·8	82·4	86·0	87·8	88·8	87·3	84·3	82·6	82·2	83·9	14 0	89·0	6 0	80·6
15	81·3	81·0	81·3	81·3	84·3	86·1	87·7	87·2	86·3	84·8	83·9	83·1	84·0	11 55	88·8	5 3	80·2
16	82·6	81·4	81·5	81·2	84·7	87·3	89·3	90·9	89·4	86·6	85·6	84·7	85·4	14 0	91·6	5 43	81·2
17	83·7	82·6	81·7	81·9	84·4	88·1	89·8	90·0	89·3	86·4	84·6	84·1	85·6	12 53	90·7	4 58	81·3
18	83·4	82·2	82·0	81·2	83·3	86·8	88·7	89·8	87·8	85·2	83·4	83·0	84·7	14 9	90·1	6 2	81·2
19	82·6	81·8	81·8	82·0	84·8	87·6	89·6	89·2	87·9	84·6	83·0	82·1	84·7	12 38	89·9	4 33	81·7
20	81·9	81·6	81·3	80·5	83·1	86·6	88·5	89·1	88·3	84·8	82·6	81·7	84·1	13 43	89·8	6 2	80·5
21	80·0	79·4	78·7	79·4	82·5	85·4	87·4	88·4	86·5	83·8	82·7	82·3	83·1	13 33	89·0	5 3	77·9
22	82·5	81·7	80·7	80·4	84·2	86·5	89·3	89·2	87·8	84·9	83·9	83·5	84·6	13 13	90·0	5 43	80·1
23	83·4	82·9	82·4	82·5	85·2	88·4	90·1	91·4	89·4	86·6	85·3	84·9	86·0	14 4	91·7	5 8	82·0
24	84·7	84·3	83·4	83·6	85·5	89·0	90·9	91·1	89·6	87·2	86·3	85·5	**86·8**	12 40	91·4	4 14	83·3
25	85·2	84·7	84·3	84·3	85·5	88·1	90·6	91·4	89·9	86·6	82·2	81·7	86·1	13 43	**92·0**	20 28	81·7
26	83·3	83·6	82·6	82·3	84·9	88·3	90·4	90·7	90·0	87·4	85·9	84·8	86·1	14 0	91·0	5 23	81·7
27	84·9	84·4	83·8	83·6	85·1	88·5	90·1	90·7	90·4	86·6	85·6	85·2	86·5	13 0	91·6	4 58	83·0
28	84·2	83·3	83·0	83·3	84·4	87·8	90·7	91·2	89·0	85·7	84·2	84·1	85·9	13 18	91·6	5 18	82·6
29	84·0	83·3	82·8	82·2	84·6	87·0	90·6	90·5	87·8	84·9	83·7	83·6	85·4	12 58	91·1	6 4	81·8
30	83·3	82·8	81·9	81·2	84·3	87·5	89·2	89·5	89·5	87·4	84·6	84·0	85·5	13 13	90·3	5 58	81·1
Mean.	81·3	80·5	79·9	79·5	82·3	85·6	87·6	88·1	86·9	84·1	82·6	82·0	83·3				

*Derived from 24 hourly values.

MAY. (IN DEGREES FAHRENHEIT.)

Date.	Hours.												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	83·6	83·3	82·4	81·7	85·2	89·4	91·1	91·8	91·0	89·1	85·8	84·6	86·6	14 12	**92·6**	6 2	81·7
2	84·8	84·5	83·7	83·1	87·7	90·8	91·4	90·6	89·7	86·0	84·6	84·4	86·8	11 33	92·6	6 0	83·1
3	83·9	83·8	83·7	83·1	86·1	89·3	89·9	89·6	89·1	84·9	83·8	83·3	85·9	15 13	92·2	23 50	82·6
4	82·6	82·2	82·3	82·2	84·1	87·1	88·3	88·6	87·0	84·2	83·2	82·6	84·6	13 35	90·1	2 40	82·1
5	82·4	82·4	82·3	81·5	83·9	87·5	89·3	88·3	87·0	83·7	82·8	82·6	84·5	12 0	89·5	6 0	81·5
6	81·9	81·7	81·0	80·4	84·0	87·5	89·5	88·8	87·4	84·4	82·9	82·3	84·4	11 38	90·6	5 13	80·2
7	81·7	81·1	81·1	80·1	83·3	87·4	88·8	88·9	87·0	83·5	81·9	81·2	83·8	10 35	89·7	5 33	80·1
8	80·4	79·5	79·5	79·0	81·9	84·2	87·3	88·6	87·5	84·6	83·1	82·4	83·2	14 9	89·7	5 38	**78·5**
9	81·0	79·8	79·3	79·3	83·4	86·4	89·7	89·8	87·9	84·3	83·1	82·5	83·9	12 43	90·8	5 28	79·0
10	81·5	80·6	80·0	79·3	83·3	87·2	89·2	87·2	86·1	83·1	81·6	81·1	83·3	11 40	89·9	5 38	79·1
11	80·2	79·7	79·2	78·8	81·4	84·6	87·0	88·0	86·0	82·6	81·2	80·8	**82·5**	13 38	88·8	5 33	78·7
12	80·4	80·0	79·2	79·0	81·7	85·4	87·3	87·8	86·2	83·3	81·9	81·9	82·9	12 20	**88·6**	4 43	78·6
13	81·8	81·4	80·9	80·3	84·1	86·2	88·3	87·0	87·0	84·2	83·7	83·0	84·0	12 48	88·6	5 48	80·3
14	82·2	81·5	81·3	81·4	84·4	88·7	89·2	88·3	87·3	84·9	83·0	82·5	84·5	12 50	89·8	5 13	79·8
15	82·5	82·2	82·5	82·7	83·9	86·7	89·2	89·3	87·4	85·2	83·4	82·9	84·8	14 4	89·8	2 38	82·0
16	82·7	81·2	81·0	81·0	83·4	86·0	88·9	89·7	87·7	85·2	83·7	84·1	84·5	13 28	90·3	5 3	80·2
17	84·0	83·3	81·7	81·1	85·4	86·9	90·0	90·6	89·0	85·9	84·0	83·1	85·4	12 38	91·2	5 43	80·7
18	82·3	81·3	80·2	80·1	82·8	86·2	88·5	89·0	88·2	85·2	84·5	83·8	84·4	13 33	89·5	5 43	79·7
19	84·0	83·3	83·3	83·3	85·3	87·5	88·8	90·2	88·1	86·2	85·4	83·9	85·7	14 38	91·2	21 13	82·1
20	82·3	83·8	83·3	83·1	85·1	88·3	89·2	90·5	89·5	86·8	85·1	84·5	86·0	14 4	91·5	0 24	82·2
21	84·0	83·6	83·2	83·8	86·5	89·4	90·2	90·5	89·3	87·4	85·3	84·7	86·5	12 43	91·3	5 8	83.1
22	84·6	84·0	84·0	84·2	86·5	89·0	90·9	91·0	90·1	87·4	85·5	84·9	86·9	13 13	92·1	5 38	83·8
23	84·6	84·0	83·7	84·0	86·5	89·3	90·4	91·1	90·3	87·4	86·2	85·3	86·9	14 43	91·7	5 38	83·5
24	84·8	84·0	83·5	83·8	86·5	89·5	91·2	91·0	89·9	87·1	85·5	84·9	86·7	12 38	91·9	5 38	83·3
25	84·3	83·7	83·3	83·3	86·1	88·7	90·7	91·0	89·6	86·8	85·2	84·5	86·4	12 30	92·0	5 8	83·0
26	84·0	83·6	83·0	83·0	85·5	88·8	90·9	91·2	89·9	87·1	85·3	84·8	86·4	13 13	92·0	5 28	82·8
27	84·1	83·5	82·8	82·9	85·6	89·2	90·9	91·5	89·9	86·4	84·9	84·5	86·3	13 50	91·8	4 2	82·8
28	84·0	83·6	83·2	83·6	86·0	88·0	90·9	90·7	89·6	85·9	84·6	84·4	86·3	13 13	92·0	4 33	82·8
29	84·4	83·9	83·6	83·8	85·3	88·0	90·5	90·9	89·8	87·1	85·5	84·8	86·5	14 12	91·2	3 33	83·4
30	84·4	83·8	83·5	83·4	86·0	89·2	91·0	91·0	90·4	87·7	86·2	85·5	86·8	14 10	91·7	6 0	83·2
31	84·9	84·1	84·0	84·0	86·2	89·5	90·8	91·0	90·0	87·7	86·1	85·0	**87·0**	13 32	91·7	1 8	83·7
Mean.	83·0	82·5	82·1	81·9	84·7	87·8	89·7	89·8	88·5	85·7	84·2	83·6	85·3				

JUNE.

1	84·9	84·4	84·0	84·1	86·1	88·7	89·7	90·7	85·4	84·3	83·0	80·5	85·4	13 13	**91·6**	23 58	80·2
2	80.0	79·0	77·2	78·7	78·1	81·7	84·5	84·1	81·7	81·3	81·1	81·4	80·5	12 12	85·5	4 24	77·1
3	81·2	80·9	81·1	81·0	83·7	84·5	87·5	88·9	88·4	86·1	84·8	84·3	84·4	15 0	90·8	5 38	80·8
4	83·8	83·1	82·9	83·1	85·1	87·3	89·1	89·3	88·7	86·2	85·1	84·4	85·6	14 50	89·3	3 28	82·8
5	84·1	83·3	83·0	82·8	84·8	87·7	83·5	89·2	88·6	86·2	85·0	84·5	85·6	14 9	89·4	5 13	82·6
6	84·1	83·7	83·4	83·3	85·2	87·6	89·1	89·9	89·1	86·6	85·2	84·9	86·0	14 14	90·3	4 58	83·0
7	84·4	83·8	83·4	83·4	85·5	88·1	89·7	90·2	89·4	86·9	85·8	85·3	86·3	13 45	90·6	4 58	83·0
8	84·8	84·4	84·1	84·0	86·0	87·9	90·6	90·5	89·3	87·2	85·9	85·3	**86·7**	13 3	91·0	5 18	83·8
9	85·0	84·3	84·0	82·2	85·5	88·1	89·4	86·5	88·4	84·2	83·8	84·1	85·6	13 28	89·7	5 45	81·8
10	83·8	80·4	80·2	80·2	82·6	84.0	84·8	85·9	85·5	83·4	82·3	82·4	82·9	14 48	86·4	4 38	79·4
11	82·5	82·0	81·3	81·1	84·1	87·1	88·8	84·5	87·3	85·9	84·0	84·0	84·3	12 4	88·9	5 53	80·7
12	83·6	79·7	79·9	80·3	82·3	83·2	85·2	85·4	84·7	83·7	82·5	81·6	82·5	14 6	85·7	1 18	79·2
13	81·2	80·6	80·0	80·1	82·5	85·3	86·2	87·2	86·4	84·7	84·0	83·2	83·4	11 55	87·8	3 8	79·5
14	83·3	82·4	81·6	79·7	81·3	83·2	86·2	87·1	85·7	84·2	83·3	82·0	83·3	14 55	87·7	6 12	79·5
15	82·8	81·5	81·0	80·6	80·1	80·3	80·9	82·6	82·3	80·3	79·6	80·7	81·1	15 13	84·8	7 25	79·3
16	81·4	80·6	80·2	79·4	80·0	80·9	82·5	81·2	82·0	83·3	83·0	83·1	81·5	17 13	83·3	8 43	77·8
17	83·0	83·0	82·6	82·6	83·4	86·2	87·3	88·0	86·9	85·5	84·2	83·8	84·7	14 33	88·4	6 47	82·0
18	83·5	83·3	83·0	82·6	84·4	86·5	87·8	87·4	87·3	85·5	83·3	83·9	84·9	12 45	88·4	19 43	81·7
19	83·7	83·3	83·2	83·3	84·9	85·4	87·9	86·5	87·3	83·3	83·7	83·1	84·3	13 13	88·0	22 48	79·6
20	81·7	81·7	80·5	80·1	79·3	77·1	80·2	80·3	79·4	81·5	80·5	80·1	80·1	19 43	82·0	9 18	**76·4**
21	80·2	81·0	78·8	79·2	79·4	82·4	83·6	83·6	81·5	78·3	79·6	79·3	80·5	13 33	85·5	6 33	78·7
22	79·4	80·0	78·2	78·7	80·5	79·2	83·4	79·1	79·2	80·2	80·5	77·3	**79·5**	12 28	84·2	22 0	77·3
23	78·7	78·5	79·0	78·3	79·9	80·8	83·8	80·5	82·6	81·0	82·3	80·3	80·6	13 23	85·3	4 58	77·7
24	79·3	80·1	79·2	78·9	79·4	81·7	83·5	84·3	82·6	81·8	81·9	81·5	81·1	14 6	84·7	6 30	78·7
25	81·5	79·5	80·7	81·6	77·8	78·6	78·2	79·4	80·8	80·4	81·0	81·3	79·9	17 43	81·9	8 19	77·5
26	79·7	78·8	78·1	78·8	77·7	79·3	80·8	81·4	82·0	82·2	82·4	82·5	80·5	22 35	82·9	8 14	77·2
27	82·7	82·5	82·5	82·3	83·6	85·6	86·1	86·1	85·5	83·0	82·9	82·7	83·8	14 38	86·5	21 48	82·0
28	82·3	82·7	82·7	82·7	82·0	85·4	85·9	85·9	84·0	83·9	83·5	83·3	83·8	13 49	86·2	8 4	81·6
29	83·1	82·6	82·3	82·6	83·1	83·8	85·8	85·9	83·7	83·4	83·3	83·3	83·5	13 23	85·9	0 43	81·0
30	83·3	82·9	82·0	81·3	83·2	85·1	85·2	86·7	82·9	82·6	82·6	82·3	83·2	13 8	87·1	16 35	80·2
Mean.	82·4	81·8	81·3	81·2	82·4	84·1	85·7	85·6	85·0	83·6	83·0	82·5	83·2				

*Derived from 24 hourly values.

†The lowest hourly value given, the curve being lost near about the minimum point.

JULY. (IN DEGREES FAHRENHEIT.)

Date.	Hours.												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	81·7	81·8	81·0	81·3	80·7	83·1	83·6	79·7	80·4	80·1	80·3	77·3	80·9	12 48	84·3	22 9	77·2
2	78·9	78·0	77·7	78·7	77·6	78·9	80·8	79·5	79·1	79·4	79·7	80·4	78·9	12 33	81·6	9 3	76·7
3	80·5	79·9	79·7	80·1	81·6	82·2	84·0	79·7	80·6	78·5	81·0	80·9	80·9	13 3	85·4	15 23	77·8
4	81·1	79·9	77·0	77·5	80·4	82·2	83·1	82·3	79·4	77·9	77·4	76·6	79·3	13 13	83·6	20 43	75·0
5	76·8	75·2	77·9	78·0	80·0	78·3	81·4	81·7	79·7	80·0	78·0	79·4	79·0	14 58	82·3	1 53	**74·9**
6	80·0	80·4	77·3	80·1	78·9	80·4	81·0	78·3	78·9	80·3	80·5	80·9	79·7	12 40	82·0	4 9	77·2
7	81·2	81·0	80·6	80·5	81·7	82·4	84·5	84·9	83·8	80·3	78·1	80·5	81·7	13 3	85·0	20 0	77·6
8	80·3	79·8	80·3	79·4	78·9	82·1	84·2	84·1	84·7	82·9	80·0	80·9	81·4	13 30	85·5	1 8	76·0
9	80·5	80·8	81·0	81·0	81·9	84·1	84·9	85·3	81·4	82·6	79·4	81·0	82·0	12 43	85·5	18 58	78·2
10	79·1	79·9	79·5	80·7	82·2	83·2	84·8	85·2	85·2	83·0	82·0	81·4	**82·2**	14 40	**86·0**	0 28	76·8
11	81·5	81·1	79·5	79·4	81·7	84·1	83·2	84·6	85·2	83·0	81·9	81·2	82·1	15 18	85·5	4 38	78·8
12	81·0	80·5	79·9	80·0	79·5	82·0	82·0	82·9	83·5	82·2	79·9	80·4	81·2	15 8	84·4	6 23	78·0
13	79·1	80·1	79·7	78·1	78·9	80·0	81·4	82·8	82·3	81·8	81·2	80·9	80·6	13 23	83·7	6 33	77·0
14	80·4	80·1	79·5	77·6	78·5	82·1	82·8	84·1	82·8	80·7	79·6	78·9	80·5	15 8	84·6	6 8	77·4
15	78·9	78·2	80·0	79·1	79·5	83·0	83·4	83·6	82·9	79·7	80·4	80·8	80·5	11 58	84·2	6 56	77·6
16	79·9	80·1	79·8	79·0	80·5	82·4	84·2	84·5	83·3	78·6	79·4	80·1	80·9	14 33	85·0	6 43	77·0
17	79·6	79·8	79·9	80·1	81·3	83.0	82·6	83·8	82·3	80·5	79·5	80·3	81·0	11 8	84·2	1 0	78·1
18	79 9	79·5	78·4	79·1	80·3	83·4	84·8	83·4	84·0	81·7	81·5	79·1	81·3	15 3	85·8	22 58	78·2
19	78·4	77·9	78·6	78·6	78·9	78·3	77·2	76·9	78·4	77·9	77·2	77·8	78·0	7 13	79·6	22 58	75·8
20	77·9	78·3	79·2	79·7	80·8	80·6	82·8	83·5	82·6	80·6	80·4	79·8	80·4	14 4	83·7	0 12	77·4
21	78·1	78·0	77·8	77·2	77·7	77·3	77·5	78·4	78·2	78·2	77·4	76·9	**77·5**	0 24	78·8	3 3	76·3
22	77·1	77·1	76·8	77·4	76·5	78·2	78·7	80·0	79·2	79·7	79·7	79·4	78·4	14 17	80·8	1 38	75·3
23	79·5	79·1	78·9	77·7	78·8	77·7	76·6	78·5	78·2	79·0	79·0	78·0	78·4	8 53	79·7	11 0	75·7
24	77·5	77·2	78·0	78·2	79·3	80·3	82·6	82·7	79·6	79·0	79·3	77·9	79·5	13 55	83·3	3 18	76·4
25	78·1	78·2	78·8	79·3	79·8	80·7	82·9	82·2	79·5	80·2	80·4	79·3	79.8	12 0	83·1	23 3	76·7
26	79·3	79·1	79·0	77·5	77·9	78·5	79·6	81·9	81·5	80·6	80·1	80·5	79·7	13 38	82·5	5 40	76·9
27	79·0	79·0	79·2	77·2	78·2	79·1	82·4	82·2	80·4	80·0	79·3	80·0	79·7	13 23	82·9	5 54	76·9
28	78·5	79·5	78·0	78·6	80·0	81·2	81·6	81·4	79·5	79·5	79·6	79·6	79·6	10 33	82·3	5 3	77·2
29	79·8	79·7	79·4	79·7	80·0	80·5	78·9	81·1	79·9	80·3	80·1	79·9	79·9	14 14	81·4	9 18	77·9
30	79·6	79·6	79·8	79·7	79·7	79·2	81·7	81·9	81·4	80·3	80·1	79·7	80·2	13 38	83·3	9 13	77·8
31	79·5	79·4	79·4	79·7	80·2	81·5	82·0	82·6	81·4	80·7	80·3	80·2	80·5	13 40	83·1	8 38	79·3
Mean.	79·4	79·3	79·1	79·0	79·7	81·0	82·0	82·1	81·3	80·3	79·8	79·7	80·2				

AUGUST.

1	80·4	80·0	79·1	79·7	80·2	81·2	81·2	80·9	79·4	80·0	80·1	79·7	80·0	13 10	82·0	3 8	78·0
2	79·6	79·1	78·9	78·8	79·6	80·8	82·0	81·5	80·0	79·9	79·2	79·3	79·8	12 58	82·3	4 30	77·7
3	79·5	78·0	78·3	78·3	79·9	81·4	83·2	82·6	78·8	79·6	79·9	78·9	79·8	12 5	83 3	0 33	77·0
4	79·3	79·1	78·3	78·5	80·1	80·0	82·4	82·6	81·7	79·4	78·2	77·4	79·6	12 28	82·8	4 30	77·4
5	79·3	79·6	78·8	78·3	79·3	81·0	82·3	82·6	81·8	80·3	79·7	79·1	80·1	13 53	83·0	6 33	77·0
6	79·7	79·4	79·1	79·6	79·6	81·7	82·2	82·5	80·4	80·9	79·7	79·9	80·3	12 53	83·2	2 55	78·5
7	79·2	79·1	78·4	78·5	79·9	81·5	80·3	83·0	83·2	81·6	79·4	80·2	80·4	14 33	84·0	4 48	77·6
8	80·2	79·6	79·4	79·1	80·7	82·4	83·8	81·4	82·4	80·3	80·0	79·7	**80·5**	12 35	**84·5**	5 3	78·7
9	79·2	78·4	78·6	77·6	79·9	82·1	81·9	82·9	81·7	80·5	80·4	80·1	80·2	14 15	83·6	5 38	77·0
10	80·0	79·8	79·9	76·8	79·4	80·9	80·4	83·2	81·5	80·8	80·2	80·3	80·3	13 53	83·6	5 55	76·4
11	80·0	80·1	79·7	79·9	80·6	79·9	82·5	84·0	78·1	80·4	80·3	80·1	80·3	13 25	84·3	9 13	77·3
12	77·5	79·1	78·2	78·5	79·8	80·8	83·1	83·1	82·6	81·0	80·4	79·1	80·2	11 43	83·9	4 43	76·6
13	79·7	78·8	78·7	79·4	78·6	81·0	81·8	82·7	81·7	80·3	80·2	80·1	80·3	14 7	82·8	7 15	77·0
14	79·3	79·5	79·6	79·3	80·1	81·3	82·2	82·7	82·0	80·5	79·6	79·5	80·4	12 58	83·1	4 38	77·6
15	79·6	79·4	79·5	75·9	78·6	80·1	82·5	82·0	81·5	80·5	80·0	80·0	79·9	13 18	83·4	5 29	75·6
16	79·8	79·3	78·9	79·5	79·7	80·4	82·6	82·1	81·6	79·8	78·7	78·9	80·1	12 22	83·3	23 38	76·8
17	76·8	76·5	77·5	78·0	77·1	79·6	81·3	80·7	79·5	78·7	79·1	79·2	78·6	12 55	82·2	1 40	76·3
18	78·3	78·1	78·2	78·8	79·5	79·3	78·5	81·5	80·3	79·4	79·4	79·6	79·2	14 4	81·9	2 20	76·8
19	77·7	78·4	76·8	78·0	79·2	80·1	80·4	80·2	78·5	78·5	78·2	78·7	78·7	11 40	81·0	3 48	75·9
20	78·7	78·4	78·4	78·0	78·4	78·5	79·2	79·4	79·3	79·1	79·0	79·2	78·8	13 18	79·5	5 33	77·6
21	78·8	77·9	78·4	77·6	78·7	79·8	80·9	80·1	80·9	79·4	79·2	79·0	79·0	12 24	81·9	8 33	75·4
22	76·6	76·2	75·7	77·4	78·7	77·2	79·1	79·0	80·2	78·8	78·2	78·0	**78·1**	12 53	81·1	3 10	**75·0**
23	77·8	77·2	77·2	76·5	77·5	76·5	78·9	81·3	80·1	79·2	78·8	79·0	78·4	13 43	82·0	7 0	75·7
24	78·2	78·0	77·3	77·8	78·6	79·7	81·7	82·5	82·0	80·1	79·3	79·0	79·4	14 12	83·0	4 4	76·8
25	78·2	77·7	77·6	77·2	78·2	79·2	81·3	81·5	80·4	79·5	79·0	77·5	78·8	14 54	82·8	5 8	76·5
26	78·0	78·1	78·1	77·1	78·0	79·2	81·9	80·1	80·9	80·1	79·4	78·7	79·1	12 12	82·2	5 28	76·4
27	78·2	77·2	77·3	76·8	79·0	79·6	81·0	78·7	79·4	79·4	78·7	78·2	78·4	12 9	81·2	5 38	76·0
28	78·4	78·4	78·6	78·2	79·0	80·8	82·6	82·4	80·8	79·0	76·7	77·2	79·3	13 53	82·8	19 33	76·4
29	77·2	76·8	77·2	76·8	77·1	81·1	82·9	80·5	79·6	78·4	78·1	78·2	78·6	12 9	83·3	5 45	76·4
30	78·5	78·4	78·2	78·1	79·9	81·8	83.1	81·4	82·1	80·2	79·6	79·2	80·0	13 28	83·5	3 13	77·1
31	78·8	78·8	78·8	78·9	79·4	81·7	81·7	82·4	82·3	80·4	79·9	79·1	80·3	13 48	84·0	6 24	78·2
Mean.	78·8	78·5	78·3	78·2	79·2	80·3	81·6	81·7	80·8	79·9	79·3	79·1	79·6				

*Derived from 24 hourly values.

SEPTEMBER. (IN DEGREES FAHRENHEIT.)

Date.	Hours.												Mean.	Maximum.			Minimum.		
	0	2	4	6	8	10	12	14	16	18	20	22		Time.		Mag.	Time.		Mag.
														H.	M.		H.	M.	
1	78·8	78·8	77·7	79·0	78·3	81·2	82·6	83·4	81·6	80·8	80·3	80·1	80·2	14	4	83·8	3	33	77·6
2	78·0	78·6	78·5	79·3	80·4	80·9	79.7	82·3	82·0	80·4	79·3	79·8	80·0	11	3	83·1	2	58	77·8
3	79·8	79·5	79·3	79·2	80·0	77·3	75·8	77·0	78·3	75·9	77·5	78·1	78·0	8	0	80·1	18	20	74·6
4	78·1	78·0	78·4	78·7	78·8	80·3	80·8	81·8	80·4	79·2	79·3	79·0	79·4	14	14	82·2	2	9	77·8
5	79·0	78·8	78·3	78·3	78·9	81·4	81·4	82·9	81·6	80·0	78·8	79·0	79·8	11	35	82·9	5	24	77·9
6	78·7	78·0	78·0	78·0	79·4	79·1	82·4	82·1	82·4	80·5	79·5	78·8	79·7	12	14	83·5	5	43	77·6
7	78·4	78·2	78·5	78·5	77·7	78·5	80·6	82·1	82·2	80·3	79·4	79·1	79·5	14	48	82·9	2	33	77·1
8	79·0	78·5	78·0	78·2	78·7	77·9	77·9	81·4	82·2	79·8	79·4	78·1	78·9	15	16	83·0	9	23	75·9
9	76·2	75·8	75·7	76·1	78·9	80·4	82·5	82·7	82·4	80·5	79·7	79·4	79·1	13	18	83·0	1	10	75·2
10	79·3	78·8	78·4	78·3	77·3	80·4	80·4	82·3	83·3	80·7	79·5	79·1	79·8	15	54	83·6	7	13	76·3
11	78·8	78·5	77·3	77·4	78·1	79·6	80·7	81·9	81·9	80·1	79·3	78·2	79·3	16	9	82·6	7	8	77·1
12	79·1	78·8	78·7	78·5	77·5	82·0	82·3	83·9	83·3	80·9	80·1	79·6	80·4	14	0	84·4	6	48	77·4
13	79·0	78·9	78·8	78·5	80·5	83·0	84·1	83·7	82·5	80·8	80·0	79·5	**80·8**	11	58	84·3	5	44	78·3
14	79·4	78·8	78·6	79·0	80·1	82·6	83·3	83·1	82·5	81·2	80·6	80·2	80·7	12	48	84·0	3	44	78·4
15	80·1	79·7	79·5	79·7	78·9	80·3	80·5	78·9	80·1	80·1	79·6	79·5	79·7	15	30	81·4	7	38	77·8
16	79·4	78·9	79·1	79·1	79·4	79·1	77·7	80·6	79·1	79·3	78·4	78·8	78·9	14	14	81·0	12	33	76·7
17	77·4	76·0	78·3	78·5	79·4	81·8	82·7	81·7	80·8	79·1	79·3	78·6	79·5	12	53	84·0	2	2	75·7
18	78·7	78·5	78·4	79·2	80·2	82·0	81·5	82·8	81·4	78·5	78·7	79·5	80·0	13	38	83·3	18	24	77·2
19	79·3	79·1	78·7	78·2	79·5	81·7	83·7	81·3	83·0	80·9	80·3	80·3	80·4	12	43	83·8	5	18	77·9
20	78·5	76·3	75·9	75·1	76·7	80·3	79·7	80·8	81·4	80·0	80·0	80·0	78·7	15	54	81·5	6	14	74·4
21	77·2	77·2	78·7	78·4	79·4	81·4	83·3	84·0	82·7	80·4	79·9	78·3	80·1	13	3	84·2	0	50	76·1
22	75·7	75·6	74·6	74·2	74·9	75·9	78·2	78·3	77·4	77·3	76·8	77·1	**76·2**	12	24	79·3	5	33	**73·8**
23	76·9	76·9	76·2	76·1	78·1	79·5	79·5	78·7	80·1	79·1	78·8	78·4	78·2	13	13	81·0	5	44	75·9
24	77·9	77·5	76·8	76·2	77·8	80·4	82·3	83·6	83·9	80·5	79·3	77·8	79·5	15	28	84·6	6	40	75·8
25	77·6	77·8	77·2	76·8	79·0	81·1	83·3	84·0	83·5	80·6	79·5	79·2	79·9	13	23	84·4	3	28	75·9
26	78·8	77·9	77·3	77·8	79·3	78·5	82·0	82·9	82·6	79·6	78·7	77·9	79·4	14	4	83·5	4	28	76·9
27	77·4	76·5	75·8	76·0	78·1	79·5	82·2	83·4	83·1	80·1	79·3	78·1	79·2	14	14	84·0	4	12	75·7
28	78·4	76·9	75·7	76·1	77·9	81·1	82·2	83·6	82·8	80·2	79·7	79·1	79·4	14	12	84·2	4	9	75·6
29	78·0	77·7	76·9	76·5	78·8	80·2	82·0	83·4	83·2	80·9	80·5	79·5	79·8	14	19	84·2	1	23	76·5
30	78·1	76·4	76·5	76·5	78·9	81·5	84·0	84·4	84·0	81·1	81·0	80·9	80·3	14	35	**85·4**	2	33	75·8
Mean ..	78·4	77·9	77·7	77·7	78·7	80·3	81·3	82·1	81·9	80·0	79·4	79·0	79·5						

OCTOBER.

1	80·6	80·1	79·7	78·2	81·1	81·7	84·4	85·2	84·0	82·2	81·8	81·5	81·7	13	28	85·5	6	2	78·2
2	81·2	80·8	80·1	78·9	80·6	83·0	85·0	85·2	84·4	82·6	79·3	78·4	81·7	13	10	85·9	22	4	78·3
3	78·2	78·4	77·6	77·5	79·6	82·5	84·1	85·3	85·2	82·8	82·7	81·9	81·3	14	43	86·0	4	33	77·5
4	80·8	80·3	79·3	78·6	80·5	82·2	84·9	86·9	85·8	83·2	81·6	80·0	82·0	14	14	87·3	6	14	78·2
5	79·9	79·6	79·3	77·4	80·3	82·5	84·7	86·9	85·7	83·1	82·1	81·3	81·9	14	7	87·0	6	19	77·3
6	80·8	80·2	79·2	78·2	81·2	84·0	85·0	86·3	84·4	82·6	81·9	81·1	82·0	12	44	86·5	6	28	77·8
7	79·3	79·4	79·3	77·7	80·5	81·9	84·6	84·1	83·4	80·9	80·3	80·1	81·0	11	32	85·4	5	48	77·6
8	79·7	79·4	79·3	78·8	80·5	81·9	84·4	85·9	85·5	83·0	81·6	80·4	81·7	15	13	86·6	6	23	78·3
9	80·1	79·3	78·0	77·0	78·8	82·5	84·3	85·9	85·5	83·1	81·5	80·7	81·5	14	33	86·4	5	33	76·8
10	79·4	78·4	78·3	78·3	79·4	82·5	85·7	88·4	87·1	83·8	77·4	77·7	81·4	14	20	88·6	23	30	77·0
11	77·2	76·3	77·2	77·1	77·5	78·6	82·5	84·8	87·4	83·0	82·6	80·8	**80·4**	15	46	87·7	0	53	75·6
12	78·7	77·8	77·6	77·2	79·4	83·3	86·6	86·7	86·4	83·6	82·3	81·0	81·7	14	43	87·3	6	14	76·6
13	79·3	79·8	78·8	78·5	81·1	84·3	87·0	88·4	88·1	84·6	83·3	80·8	82·9	15	20	88·6	5	48	78·0
14	80·1	79·1	78·4	76·9	79·2	83·6	86·2	87·4	87·1	84·2	83·5	81·0	82·2	15	3	88·0	6	48	76·2
15	79·6	77·7	77·6	76·4	78·1	81·2	85·8	86·4	86·4	83·3	81·4	78·5	81·0	14	38	86·6	6	9	76·2
16	77·4	76·7	76·7	75·8	78·2	81·5	85·9	88·4	87·1	84·1	82·6	80·8	81·3	14	9	88·6	6	18	75·2
17	78·4	78·7	78·2	76·6	79·1	81·1	87·1	87·0	86·3	83·4	82·0	80·9	81·5	12	22	88·2	6	28	76·1
18	80·2	79·0	77·5	77·5	79·4	83·1	86·2	87·9	85·4	82·7	82·2	80·2	81·7	13	18	88·8	6	33	77·1
19	78·7	78·2	77·3	76·6	78·3	82·2	87·3	86·9	85·9	81·6	81·1	80·5	81·2	12	43	89·3	5	13	75·9
20	79·1	77·3	76·3	75·7	78·2	82·5	85·4	87·2	85·8	82·6	79·3	78·5	80·6	13	35	87·4	5	18	**74·8**
21	78·7	78·1	76·4	76·1	78·4	81·5	85·3	86·7	86·1	82·5	81·0	79·2	80·8	14	43	87·8	5	44	76·0
22	78·7	78·5	77·5	76·4	79·2	82·0	85·5	88·2	86·6	82·6	79·9	78·7	81·2	14	28	88·7	5	23	76·2
23	79·4	78·7	76·5	76·7	78·5	82·9	86·5	88·5	86·6	82·5	80·7	79·3	81·3	13	39	89·1	4	38	76·1
24	78·3	77·4	76·1	75·8	78·2	83·3	87·1	89·2	87·4	83·1	81·0	79·2	81·3	13	43	90·1	5	54	75·4
25	79·4	77·5	77·2	76·1	78·0	82·8	87·2	90·0	87·6	83·3	81·6	80·2	81·7	14	22	90·9	6	9	76·0
26	78·2	77·7	76·6	75·4	78·6	82·5	87·0	88·0	85·7	82·5	81·7	80·9	81·2	13	8	89·4	6	20	75·0
27	79·5	78·7	77·9	77·8	78·2	82·6	87·9	86·8	85·3	82·5	81·9	79·9	81·5	12	19	89·9	5	38	77·5
28	78·0	77·7	76·9	77·2	78·6	82·4	86·8	86·4	85·6	82·7	82·9	80·0	81·2	14	48	87·0	3	48	76·5
29	79·1	79·6	79·1	80·0	81·9	85·7	89·3	89·0	86·3	83·2	82·8	81·8	83·1	13	21	90·7	4	19	78·9
30	80·2	80·5	79·7	80·2	81·9	84·9	88·7	88·2	87·0	83·8	82·4	82·8	**83·4**	12	53	90·1	0	58	79·7
31	82·2	81·1	80·9	80·3	82·7	86·7	89·5	89·1	86·7	81·6	80·8	80·4	83·3	12	45	**91·0**	21	33	80·0
Mean ..	79·4	78·8	78·1	77·4	79·5	82·7	86·1	87·1	86·1	82·9	81·5	80·3	81·6						

*Derived from 24 hourly values.

NOVEMBER. (IN DEGREES FAHRENHEIT.)

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*	Maximum. Time. H.	M.	Mag.	Minimum. Time. H.	M.	Mag.
1	80·7	80·5	79·8	78·8	80·5	82·9	86·9	89·4	88·0	83·5	82·8	81·2	**82·9**	13	33	89·4	5	49	78·6
2	79·9	79·2	78·0	78.7	80·4	84·3	88·1	87·0	85·8	82·1	81·2	80·3	82·1	13	3	89·6	4	14	77·2
3	78·1	78·2	77·5	78·2	79·5	83·6	88·7	87·4	81·3	81·5	81·1	78·9	81·3	13	8	90·4	3	18	76·8
4	77·9	77·2	76·1	76·2	78·8	83·3	88·7	88·2	84·5	80·9	81·2	79·3	81·0	12	28	89·6	4	33	75·6
5	78·5	78·4	77·5	77·1	79·0	83·0	88·5	87·6	83·7	81·8	81·1	81·6	81·6	13	30	**91·9**	6	4	76·8
6	80·7	80·4	79·0	77·8	77·6	80·9	83·0	84·7	84·0	82·5	81·0	80·3	81·1	14	43	85·9	7	53	77·1
7	79·7	78·8	77·2	77·1	78·9	81·5	83·7	85·4	83·7	81·3	80·2	80·1	80·7	13	58	85·5	6	4	76·9
8	78·7	78·0	77·5	76·8	79·0	82·3	84·3	86·4	84·1	80·8	80·1	79·7	80·6	14	22	86·8	6	28	76·3
9	79·4	78·4	78·4	78·5	79·9	84·0	87·7	86·0	82·9	80·5	80·8	79·6	81·3	12	12	88·4	2	43	77·9
10	79·7	79·3	79·3	79·0	81·0	84·1	86·8	86·9	85·9	83·1	82·0	81·1	82·4	13	3	88·2	3	30	79·0
11	80·4	80·9	79·8	78·5	79·2	81·4	84·0	83·5	83·1	81·5	80·8	79·8	81·0	11	23	84·9	5	30	78·4
12	78·8	78·4	77·4	78·0	78·9	83·0	84·9	86·4	84·4	81·6	80·4	79·1	80·9	14	58	86·7	4	4	77·3
13	77·7	77·2	78·4	76·1	77·9	81·5	82·8	85·0	83·3	80·7	80·2	77·9	79·9	13	48	85·7	6	14	75·6
14	75·3	72·8	74·8	74·2	76·3	80·9	85·6	85·0	83·3	81·0	80·5	79·4	79·1	13	8	87·3	2	19	72·4
15	77·2	76·4	75·3	75·3	76·5	81·8	86·9	87·7	85·6	81·9	80·4	78·9	80·3	14	14	88·3	3	40	74·5
16	78·0	75·5	75·1	74·6	76·7	81·0	85·1	86·3	84·4	81·0	79·9	78·3	79·6	13	25	87·8	6	19	74·3
17	76·4	74·6	74·8	73·9	75·8	79·8	84·4	86·9	84·3	80·7	79·9	78·6	79·1	14	4	87·2	5	43	73·6
18	75·7	75·9	74·2	73·9	75·0	79·9	84·9	85·9	85·5	80·9	79·1	77·3	79·0	14	50	87·4	6	22	73·6
19	75·5	75·1	74·3	73·0	75·0	79·4	84·4	86·3	84·6	79·8	78·4	75·6	78·4	14	41	87·0	5	48	72·9
20	75·1	73·6	71·3	71·3	73·0	77·5	81·4	84·9	82·6	78·4	77·1	75·2	76·8	14	19	85·7	5	23	70·4
21	75·4	73·5	71·3	69·2	71·4	76·5	81·0	83·3	80·8	77·4	75·8	74·1	**75·6**	14	4	83·7	6	24	**68·8**
22	73·5	72·8	71·3	69·9	72·1	77·2	82·3	84·0	82·1	79·1	77·9	76·8	76·6	13	23	84·1	6	0	69·8
23	74·6	75·4	75·4	75·1	77·2	83·2	88·1	86·0	82·8	80·4	80·0	79·3	79·9	12	54	89·3	0	3	74·1
24	78·6	77·3	77·9	77·0	78·7	81·7	85·2	86·2	83·9	81·8	81·0	80·3	80·8	12	53	87·2	6	30	76·6
25	78·7	78·7	78·5	76·8	78·2	81·9	85·4	84·5	82·7	81·1	80·7	80·2	80·6	12	55	85·8	6	3	76·4
26	79·3	78·4	77·2	76·8	78·5	83·5	85·9	88·2	85·1	82·2	81·9	80·4	81·6	15	0	89·5	6	12	76·4
27	80·0	79·7	78·8	78·4	80·2	84·2	89·0	89·7	86·0	82·1	81·7	81·2	82·6	14	28	90·2	4	28	77·9
28	80·5	79·7	78·2	77·8	79·3	82·6	88·1	87·0	84·1	82·0	81·4	80·8	81·8	13	18	90·1	6	24	77·6
29	78·3	78·1	77·4	76·7	77·9	82·1	87·9	87·9	84·5	82·1	81·4	79·6	81·1	13	48	90·1	6	24	76·3
30	76·7	76·9	75·9	75·6	77·4	81·3	85·2	88·4	84·9	81·1	80·3	77·9	80·0	14	7	88·5	0	34	75·3
Mean ..	78·0	77·3	76·6	76·0	77·7	81·7	85·6	86·4	84·2	81·2	80·3	79·1	80·3						

DECEMBER.

1	77·1	75·7	74·5	74·7	76·5	81·2	86·0	88·5	88·2	81·9	79·9	77·8	80·1	14	40	88·7	3	56	74·2
2	78·1	76·6	75·7	75·7	78·3	82·6	86·2	88·7	84·2	80·8	79·7	77·7	**80·2**	14	24	**88·8**	5	53	75·3
3	75·0	75·0	74·3	73·8	75·9	80·2	84·4	87·2	83·8	80·4	79·3	76·1	78·7	13	38	87·5	6	9	73·2
4	74·6	74·6	73·3	72·7	73·8	78·5	82·8	85·2	83·8	79·9	77·7	75·6	77·7	15	5	85·3	6	48	72·2
5	75·9	75·1	74·4	72·4	74·0	78·6	83·5	83·7	82·5	79·7	78·5	76·1	77·8	12	19	84·0	6	14	71·5
6	74·6	74·3	73·7	72·4	73·6	77·1	80·8	83·7	83·0	79·6	77·9	75·7	77·2	14	28	84·1	6	24	71·7
7	74·9	74·8	74·0	72·6	73·5	76·6	80·7	82·3	81·3	79·0	78·1	75·7	76·8	14	4	82·9	6	43	72·0
8	73·4	73·0	73·2	71·9	72·6	77·2	82·2	84·7	82·3	78·8	77·8	75·6	76·9	14	43	85·5	6	58	71·2
9	73·0	73·2	72·5	70·9	72·1	76·5	80·1	81·2	80·4	77·6	76·5	74·6	75·8	14	35	82·1	6	30	70·4
10	72·9	72·5	72·1	71·3	72·1	75·5	79·0	80·4	79·1	76·3	75·2	73·6	75·1	14	14	81·2	6	14	71·2
11	72·3	72·7	72·5	71·7	72·8	75·9	78·4	79·4	78·9	76·1	75·2	73·5	75·0	13	18	80·0	6	24	71·3
12	73·5	73·2	72·6	72·1	73·3	77·2	81·0	81·4	80·1	77·3	77·0	76·9	76·3	14	9	81·5	6	38	71·7
13	76·7	77·0	74·2	74·2	75·5	78·9	80·2	80·4	80·4	77·0	76·2	75·0	77·1	11	23	80·6	3	48	74·2
14	73·1	72·0	71·6	70·3	71·5	76·2	81·1	82·1	79·8	77·2	75·4	73·5	75·2	13	18	83·0	6	30	69·6
15	71·5	69·7	67·9	68·5	70·7	75·2	80·4	80·9	80·3	77·1	76·5	75·2	74·4	12	48	81·0	4	58	67·6
16	71·7	71·7	71·0	70·9	72·2	76·5	80·2	82·1	81·7	77·9	76·8	75·3	75·6	14	33	82·8	6	33	70·3
17	72·7	71·6	71·3	69·7	71·3	76·1	79·3	81·3	79·7	76·7	75·8	74·1	74·8	14	9	81·4	5	18	69·3
18	71·0	69·3	68·9	68·8	70·0	75·0	79·2	80·3	79·3	75·8	74·8	71·7	73·6	15	3	80·7	6	43	68·1
19	70·9	71·7	70·0	69·5	70·3	75·1	80·2	82·8	83·0	77·9	76·4	74·4	75·2	15	8	83·7	6	4	69·3
20	72·9	72·1	71·4	70·7	71·3	75·5	79·0	80·5	80·0	76·8	75·7	74·5	75·0	13	8	81·5	6	45	70·3
21	72·2	71·6	71·5	71·1	71·7	76·1	78·6	80·4	79·8	76·8	75·4	73·5	74·9	13	28	81·1	6	33	71·0
22	71·7	71·5	70·2	70·0	71·7	75·3	78·2	80·8	79·1	74·7	74·5	73·7	74·3	14	4	81·0	4	38	69·7
23	73·8	72·6	72·7	72·0	73·7	73·1	77·5	78·2	77·5	74·6	72·8	70·1	73·8	14	35	78·7	23	50	67·5
24	67·6	66·1	66·7	65·6	67·1	71·0	75·4	77·8	77·2	74·4	73·0	70·4	**71·0**	14	14	78·9	6	30	64·9
25	67·8	66·0	65·3	64·8	67·4	73·3	78·6	83·4	78·5	75·4	74·2	71·7	72·1	14	4	83·7	6	30	**64·5**
26	71·0	70·4	69·5	68·8	69·1	74·1	79·2	83·8	79·2	75·9	74·4	71·6	73·8	14	14	84·3	6	38	68·4
27	69·8	70·0	69·4	68·7	70·3	74·0	80·1	83·0	80·1	76·7	75·4	71·5	73·9	14	19	83·5	5	54	68·4
28	69·5	68·9	68·2	67·7	69·1	72·8	78·3	81·9	80·1	76·1	74·4	71·9	73·2	14	24	82·1	6	38	67·0
29	69·2	68·1	67·6	66·7	68·0	72·8	79·7	80·4	79·2	76·1	74·1	71·1	72·8	13	0	82·9	6	20	66·6
30	69·9	69·9	68·4	67·5	68·7	73·9	80·5	81·9	80·1	75·9	74·1	71·5	73·5	13	48	83·5	6	48	67·3
31	70·3	69·5	68·8	67·7	69·9	73·6	78·1	77·2	77·9	74·9	73·7	72·1	72·8	13	11	79·4	6	14	67·6
Mean ..	72·5	71·9	71·2	70·5	71·9	76·0	80·3	82·1	80·7	77·3	76·0	73·9	75·3						

* Derived from 24 hourly values.

JANUARY. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*
1	83	78	75	77	73	59	37	43	51	55	54	54	60·9
2	52	48	51	46	49	42	40	46	52	59	60	64	51·3
3	54	60	57	50	48	56	39	56	62	62	67	61	56·0
4	62	65	57	57	61	56	36	46	52	69	72	74	61·1
5	79	82	82	86	79	72	62	65	72	81	86	89	77·7
6	86	87	86	86	83	75	69	71	73	80	86	89	**81·1**
7	89	90	90	89	90	83	69	68	68	71	75	78	79·9
8	82	87	85	86	85	77	71	62	64	73	74	74	76·4
9	75	75	71	74	71	63	65	71	66	63	65	62	68·2
10	61	61	63	69	73	65	69	70	72	74	76	70	68·4
11	73	73	74	73	72	67	55	60	67	74	67	71	69·4
12	76	83	78	77	74	68	52	63	66	79	76	72	71·8
13	76	76	79	78	75	66	48	67	69	79	76	73	72·3
14	77	75	83	76	82	71	62	65	66	71	67	64	71·7
15	75	73	75	81	74	66	59	65	70	76	80	79	72·6
16	78	80	85	70	74	69	50	63	70	77	81	76	72·1
17	74	79	79	76	75	67	53	60	69	74	80	84	73·1
18	82	85	88	75	63	63	64	59	64	68	77	81	72·9
19	81	63	75	85	80	70	60	56	63	68	66	70	69·2
20	76	78	77	78	75	61	50	49	54	56	62	68	65·3
21	69	64	75	75	73	45	40	50	51	52	51	56	57·4
22	47	50	54	44	46	39	42	37	43	59	60	64	**49·2**
23	61	64	72	60	68	53	35	49	57	71	71	58	59·1
24	62	60	61	64	69	54	39	59	63	74	70	75	64·1
25	61	72	67	78	75	65	54	62	68	74	69	71	68·9
26	74	79	85	82	77	68	61	67	72	80	80	69	74·3
27	76	78	80	75	71	66	60	67	65	77	79	75	72·2
28	73	74	74	72	71	68	67	66	66	77	79	81	73·0
29	82	77	80	82	64	54	51	58	60	65	74	66	67·0
30	63	54	56	51	55	50	48	53	58	65	70	68	57·7
31	72	77	77	71	65	58	56	58	63	67	74	79	67·9
Mean.	72·0	72·5	73·9	72·4	70·6	62·5	54·3	59·1	63·1	70·0	72·0	71·5	67·8

Highest hourly value during January = 90.
Lowest do. do. = 31.

FEBRUARY.

1	82	84	69	68	67	55	42	57	63	62	74	68	66·3
2	74	76	61	74	78	67	63	59	61	63	68	72	67·3
3	60	76	76	78	72	58	49	57	40	42	56	58	61·0
4	50	50	51	49	45	31	36	44	52	59	59	73	**50·3**
5	74	77	61	51	50	46	27	45	53	63	66	75	57·6
6	75	66	65	54	46	43	29	40	58	70	71	75	57·7
7	83	60	50	37	60	51	31	49	49	66	70	56	55·3
8	69	74	61	67	66	56	53	55	59	70	77	72	64·2
9	63	60	62	61	56	47	48	49	45	59	58	72	57·7
10	76	74	73	72	67	58	55	57	66	70	74	69	68·1
11	73	80	78	75	72	59	40	50	56	72	79	83	69·3
12	78	79	78	80	75	67	59	69	66	71	79	79	73·9
13	81	80	85	84	81	69	66	64	67	77	79	80	76·1
14	83	88	83	84	79	73	68	68	65	74	83	85	77·8
15	84	84	83	72	66	60	67	71	67	65	67	62	70·8
16	79	76	81	83	79	69	74	72	74	77	74	74	75·8
17	76	80	80	86	80	73	70	69	70	76	79	82	77·0
18	82	86	84	86	84	75	70	67	71	79	81	83	**78·7**
19	81	80	80	82	69	63	61	66	71	74	69	61	70·7
20	55	49	48	62	58	57	52	63	69	57	60	56	57·3
21	61	53	50	46	54	43	53	51	47	49	59	63	52·9
22	67	66	60	51	56	47	54	50	65	72	69	66	61·9
23	64	68	57	73	53	43	59	61	65	75	76	77	65·4
24	82	82	83	79	70	59	58	59	59	63	61	70	68·5
25	77	86	87	88	86	79	73	73	70	73	74	77	78·7
26	79	81	83	85	83	74	68	64	68	73	76	78	75·9
27	82	81	84	85	85	70	68	68	68	78	84	85	78·2
28	84	81	84	87	82	70	63	63	68	78	81	70	76·1
Mean.	74·1	74·2	71·3	72·1	68·5	59·5	55·6	59·6	61·9	68·1	71·5	72·2	67·5

Highest hourly value during February = 88.
Lowest do. do. = 22.

* Derived from 24 hourly values.

MARCH. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*
1	74	81	82	69	74	56	55	63	71	73	76	82	71·3
2	84	83	81	76	61	56	54	66	67	66	69	77	69·9
3	78	84	80	81	79	69	73	69	69	67	70	75	75·3
4	79	79	77	76	70	57	54	49	51	58	57	62	63·8
5	58	61	63	73	62	56	53	51	43	53	48	59	57·0
6	51	46	47	49	38	44	49	54	51	54	56	49	49·7
7	46	42	47	60	53	39	20	52	51	60	62	64	51·0
8	69	55	71	46	46	28	18	43	53	56	63	69	51·3
9	66	77	72	64	64	38	42	51	58	63	63	70	61·1
10	78	79	69	65	62	62	68	61	63	69	78	73	68·5
11	80	83	88	83	74	69	71	57	66	74	80	84	75·0
12	84	84	67	84	79	76	55	57	57	65	62	49	66·3
13	78	75	68	76	63	50	59	58	57	58	64	72	65·1
14	70	76	67	61	51	55	58	59	56	54	65	69	62·1
15	74	78	70	66	72	58	64	60	63	70	72	76	69·2
16	77	84	85	74	75	72	67	65	71	80	85	88	77·3
17	89	83	88	88	85	62	62	63	70	77	78	84	77·6
18	86	87	87	89	84	70	66	64	73	80	82	86	78·8
19	86	83	88	88	82	75	71	69	58	69	72	76	76·2
20	79	77	80	79	64	58	53	55	63	71	73	77	69·2
21	80	81	81	74	69	56	63	66	66	78	81	84	73·1
22	84	83	86	85	82	70	62	63	60	69	73	74	73·7
23	79	82	76	75	63	58	59	61	67	70	72	76	69·4
24	78	78	84	86	77	69	66	62	61	68	73	80	73·8
25	84	82	77	80	75	71	64	56	65	76	75	80	73·7
26	82	84	84	84	78	75	71	60	62	69	73	81	75·5
27	77	79	84	85	82	76	69	67	61	75	76	79	75·8
28	83	86	83	83	75	70	60	61	63	68	71	76	72·8
29	81	75	77	78	75	70	64	63	49	60	64	63	68·5
30	66	68	70	78	72	64	58	55	56	65	71	74	66·7
31	76	78	79	83	74	66	66	58	59	69	73	76	71·4
Mean.	76·0	76·5	76·1	75·4	69·7	61·1	58·5	59·3	60·6	67·3	70·4	73·7	68·7

Highest hourly value during March = 89.
Lowest do. do. = 15.

APRIL.

1	76	79	84	84	79	69	65	60	62	69	75	76	73·3
2	75	83	75	67	52	51	56	50	51	56	66	69	61·7
3	75	76	78	80	78	68	63	59	67	74	76	78	72·5
4	81	83	84	80	74	75	77	75	77	82	83	85	79·6
5	86	86	88	89	86	79	73	70	65	71	76	81	79·1
6	82	84	87	91	82	77	73	67	71	80	84	83	80·0
7	88	86	84	88	82	78	72	68	70	78	79	78	79·5
8	83	83	85	85	72	67	68	68	68	71	78	83	75·6
9	83	82	83	82	81	74	69	67	68	77	81	85	77·6
10	85	84	83	81	61	67	64	58	62	71	76	81	72·7
11	84	85	88	88	80	73	68	67	70	79	86	88	79·4
12	86	79	84	79	78	60	60	69	72	77	81	78	75·7
13	85	88	86	89	78	71	70	66	75	81	83	87	79·6
14	87	89	88	89	87	76	68	64	72	80	86	87	80·6
15	87	86	78	73	74	80	70	72	68	68	71	74	75·3
16	77	81	79	86	68	72	64	66	65	69	75	81	73·8
17	85	87	89	88	70	64	63	63	64	70	77	81	75·5
18	82	84	84	84	79	72	69	67	69	76	81	79	77·3
19	81	80	82	79	76	70	64	65	67	76	81	80	75·0
20	81	79	83	84	75	67	61	59	57	66	73	81	72·3
21	83	81	82	82	76	67	65	61	67	74	77	79	74·1
22	77	78	80	81	75	69	63	64	67	73	75	77	73·1
23	77	76	78	78	73	67	63	61	67	74	78	81	72·7
24	80	82	83	84	80	69	67	67	70	75	76	79	75·8
25	79	80	81	83	79	72	63	62	69	64	77	73	73·7
26	79	81	79	79	75	67	62	63	65	71	73	77	72·5
27	77	79	81	82	79	69	66	63	66	74	76	75	73·8
28	77	79	80	78	77	66	61	61	67	71	74	75	72·3
29	76	77	79	80	73	69	62	63	66	72	77	76	72·4
30	76	75	80	81	74	69	69	69	64	68	79	82	73·7
Mean.	81·0	81·7	82·5	82·5	75·8	69·8	65·9	64·5	66·9	72·9	77·7	79·6	75·0

Highest hourly value during April = 91.
Lowest do. do. = 38.

* Derived from 24 hourly values.

MAY.

(THE FIGURES REPRESENT PERCENTAGES).

Date.	Hours.												Mean.*
	0	2	4	6	8	10	12	14	16	18	20	22	
1	81	79	82	83	68	60	63	56	58	58	76	78	70·3
2	75	74	77	79	55	55	62	61	63	75	79	78	69·2
3	83	81	83	85	68	62	68	65	66	75	77	77	73·5
4	78	79	76	74	71	61	59	60	63	74	78	80	70·7
5	79	77	76	78	73	67	64	65	67	75	77	77	73·0
6	80	80	83	84	74	61	54	53	55	64	69	72	68·7
7	75	76	77	79	67	48	56	53	48	64	73	70	65·1
8	64	69	73	78	70	68	62	63	64	67	69	75	68·5
9	78	82	83	84	74	66	51	48	51	62	64	70	67·4
10	74	72	72	72	60	49	53	53	54	51	52	55	**58.7**
11	64	69	73	74	66	64	62	58	60	62	70	75	66·9
12	78	76	79	78	72	66	66	66	67	75	77	78	73·1
13	75	81	83	81	75	72	69	72	71	76	81	84	76·8
14	87	84	85	86	79	64	65	71	72	79	84	83	78·3
15	85	87	85	83	80	79	71	69	70	75	81	82	78·5
16	82	87	87	85	81	74	68	71	72	75	79	68	77·2
17	71	73	77	82	78	73	63	66	65	72	77	82	73·3
18	83	86	87	89	83	74	70	70	73	79	82	76	**78·8**
19	73	76	83	85	81	74	71	68	71	74	77	68	74·6
20	67	79	80	81	71	68	68	64	67	72	76	79	72·9
21	79	81	81	82	76	69	67	68	69	71	76	78	74·7
22	80	81	81	80	78	69	67	65	66	72	76	78	74·1
23	79	76	81	79	75	68	68	63	68	73	76	78	73·6
24	77	76	79	78	69	66	62	63	63	69	73	74	70·5
25	74	74	75	76	70	65	60	62	64	68	71	74	69·3
26	75	74	75	75	70	66	60	60	61	66	71	73	68·5
27	74	71	73	74	70	62	60	60	62	70	71	73	68·5
28	74	73	75	72	71	67	64	61	65	71	74	74	70·0
29	74	75	75	75	72	65	62	61	62	67	70	72	69·2
30	73	74	75	75	70	64	61	57	62	67	70	74	68·3
31	73	77	76	75	70	63	61	60	63	66	67	70	68·4
Mean.	76·3	77·4	78·9	79·4	72·2	65·5	63·1	62·3	63·9	69·8	74·0	75·0	71·3

Highest hourly value during May = 89.
Lowest do. do. = 46.

JUNE.

1	72	74	73	74	68	63	61	58	70	74	78	86	71·2
2	89	91	92	92	91	85	79	80	83	87	87	87	87·3
3	88	87	87	87	83	86	75	68	70	74	76	77	79·6
4	78	77	79	78	75	70	67	68	68	72	76	75	73·4
5	75	76	74	76	75	69	66	63	64	71	74	74	71·5
6	75	75	75	73	72	66	63	62	63	68	70	71	**69·3**
7	73	75	76	74	72	67	68	63	68	73	76	76	71·6
8	75	77	76	76	73	69	65	63	66	71	74	76	71·7
9	77	77	78	83	78	72	71	76	72	75	77	81	76·2
10	84	83	87	86	80	75	73	70	71	76	79	80	78·5
11	79	81	82	84	78	72	70	82	72	74	78	80	77·5
12	84	87	87	89	83	80	72	76	76	80	81	85	81·5
13	85	84	88	87	82	76	76	73	71	78	79	80	80·0
14	79	84	87	89	87	81	75	73	75	78	82	85	81·1
15	84	87	89	90	92	93	90	85	86	89	92	91	89·1
16	92	86	89	91	91	92	85	81	85	85	83	82	87·0
17	81	83	83	83	81	76	74	72	73	77	80	81	78·5
18	81	80	82	83	79	76	71	73	74	76	81	80	77·6
19	80	79	80	78	78	78	73	72	69	77	80	82	77·6
20	87	83	82	87	89	91	91	90	89	89	86	84	87·5
21	92	85	89	89	89	87	86	77	89	90	91	91	87·9
22	92	90	90	91	87	90	83	91	90	87	87	90	88·8
23	90	88	88	91	87	88	84	89	83	87	85	91	87·4
24	91	92	92	91	93	89	85	80	84	85	85	89	87·9
25	87	91	88	84	93	94	93	91	92	87	89	87	**90·2**
26	92	94	95	95	93	92	89	89	87	87	86	87	90·2
27	85	84	83	84	82	78	79	78	78	85	82	83	81·7
28	86	83	83	83	83	79	79	78	82	80	80	81	81·5
29	80	81	83	79	84	83	79	79	82	83	83	82	81·5
30	83	83	81	80	84	79	79	77	83	84	84	84	81·0
Mean.	83·2	83·2	83·9	84·2	82·7	79·9	76·7	75·9	77·2	80·0	81·4	82·6	80·9

Highest hourly value during June = 95.
Lowest do. do. = 58.

* Derived from 24 hourly values.

BI-HOURLY VALUES OF RELATIVE HUMIDITY, 1922.

JULY. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*
1	84	88	87	86	86	84	83	87	86	85	87	88	86·1
2	85	86	92	87	90	91	87	92	93	89	85	89	89·1
3	87	88	88	88	86	83	79	89	90	87	87	87	86·4
4	84	86	91	91	87	83	81	81	89	91	93	92	87·4
5	89	90	93	89	88	89	85	84	83	82	91	89	87·5
6	87	85	92	87	89	87	85	92	91	89	88	85	88·1
7	83	84	85	85	86	85	80	80	79	88	90	89	84·2
8	87	89	85	84	89	84	80	82	80	81	86	87	84·7
9	86	88	86	86	85	80	77	78	81	79	82	83	82·7
10	87	89	85	85	85	81	80	78	78	84	80	83	82·6
11	80	84	87	91	85	79	81	81	74	82	81	81	82·4
12	84	86	86	87	88	85	79	83	78	78	82	82	83·5
13	85	83	84	89	90	84	85	80	79	81	83	83	84·0
14	84	87	86	93	91	86	83	80	80	84	85	86	85·6
15	87	92	83	88	90	80	79	77	79	89	80	83	84·2
16	86	82	81	82	85	79	74	76	75	84	90	85	**81·7**
17	83	87	82	86	84	82	80	79	86	86	85	87	84·2
18	83	83	86	87	84	81	77	81	77	83	83	90	83·5
19	92	93	89	90	91	93	93	94	93	91	88	92	91·3
20	93	90	86	87	85	87	83	81	83	88	87	84	86·0
21	92	91	92	92	91	93	94	93	93	93	94	95	**92·7**
22	95	95	93	95	93	93	91	91	91	87	87	85	91·3
23	88	86	87	92	89	93	94	93	93	89	89	89	90·3
24	92	91	92	90	85	90	83	80	89	90	88	88	87·7
25	86	90	86	85	84	83	79	81	84	85	82	84	84·3
26	82	83	88	91	87	89	88	79	79	81	83	82	84·0
27	87	84	84	90	87	87	80	81	82	83	88	87	84·6
28	89	83	86	85	82	80	79	82	84	84	85	82	83·5
29	84	80	83	82	82	83	84	80	84	81	85	84	82·4
30	84	83	81	81	83	85	82	81	82	80	81	83	82·3
31	84	82	84	82	83	83	82	80	83	84	85	85	83·3
Mean.	86·4	86·7	86·8	87·5	86·8	85·2	82·8	83·1	83·8	85·1	85·8	86·1	85·5

Highest hourly value during July = 95.
Lowest do. do. = 72.

AUGUST.

1	84	84	89	82	86	83	83	83	88	86	85	87	85·3
2	84	86	87	85	85	85	81	83	87	82	84	86	84·6
3	85	89	89	89	88	83	81	79	89	86	87	89	86·0
4	86	83	84	89	82	86	81	80	80	83	86	88	84·3
5	86	83	86	85	87	83	81	79	80	82	84	86	83·4
6	85	84	84	84	87	82	80	79	79	82	80	84	82·7
7	85	87	89	86	86	83	82	78	77	80	82	85	82·9
8	83	84	81	84	85	81	77	74	79	79	81	82	81·3
9	84	90	85	87	82	79	81	78	71	83	82	82	81·8
10	83	83	82	88	84	83	76	80	77	80	81	82	81·5
11	82	82	81	83	80	82	80	76	81	85	84	81	81·7
12	86	83	86	82	80	79	75	77	79	79	79	84	81·3
13	83	84	79	81	85	80	82	80	79	82	82	81	81·0
14	82	82	81	82	81	77	79	75	78	78	84	84	80·5
15	82	82	81	88	83	82	79	79	74	79	80	80	81·0
16	80	77	83	80	79	82	76	73	76	81	84	84	**79·5**
17	88	88	90	83	85	83	84	86	83	85	86	82	85·2
18	85	89	96	84	86	85	89	85	82	82	82	82	84·7
19	90	82	87	86	80	80	80	82	84	84	86	86	83·6
20	86	84	81	87	86	87	85	85	83	81	84	82	84·5
21	82	79	82	86	83	84	80	85	79	84	83	83	82·8
22	88	89	92	87	85	88	83	90	83	86	82	88	86·5
23	88	88	88	88	88	88	83	81	82	81	84	83	84·9
24	86	88	88	88	85	87	84	80	78	80	82	85	84·4
25	86	86	87	89	87	84	85	81	82	82	82	88	85·2
26	88	87	86	86	92	89	81	85	84	85	85	86	86·3
27	90	91	88	91	86	85	83	84	85	84	86	89	**87·2**
28	89	85	86	86	89	85	79	79	76	82	85	86	84·7
29	86	88	90	91	91	83	77	80	83	86	87	86	85·8
30	85	83	83	84	81	79	74	78	78	78	79	78	80·2
31	82	81	81	82	79	80	80	77	76	78	80	84	80·0
Mean.	85·1	84·9	85·3	85·6	84·6	83·1	80·7	80·4	80·4	82·1	83·2	84·3	83·4

Highest hourly value during August = 94.
Lowest do. do. = 71.

* Derived from 24 hourly values.

SEPTEMBER. (THE FIGURES REPRESENT PERCENTAGES)

Date.	Hours.												Mean.*
	0	2	4	6	8	10	12	14	16	18	20	22	
1	85	84	86	84	86	84	79	77	77	79	82	81	81·9
2	82	85	83	82	82	76	82	81	77	80	82	82	81·1
3	83	83	83	85	82	84	90	91	90	88	87	89	86·4
4	86	90	86	86	85	84	82	80	80	82	84	82	84·1
5	83	83	84	86	86	83	83	79	81	81	84	83	83·0
6	84	84	85	85	84	80	81	82	79	80	84	89	84·0
7	88	89	86	84	87	86	83	79	73	76	78	79	82·2
8	79	80	81	82	87	84	92	83	79	80	81	83	83·4
9	90	93	91	93	86	84	79	79	77	80	82	82	84·8
10	83	84	83	89	91	89	85	77	74	80	82	84	83·3
11	84	85	92	93	93	90	85	81	82	81	86	89	86·7
12	83	86	87	86	88	83	79	77	77	78	81	82	82·3
13	84	82	83	84	82	78	75	74	75	78	79	81	79·5
14	80	82	82	83	82	78	73	75	75	78	78	81	78·8
15	82	83	84	82	89	85	83	89	85	85	84	84	84·6
16	84	84	83	83	87	89	92	85	83	83	85	86	85·5
17	88	89	86	87	83	83	84	93	93	86	88	89	85·6
18	86	84	85	83	82	82	81	79	81	91	91	86	84·4
19	86	85	86	89	85	82	78	78	76	79	81	81	81·8
20	83	90	92	93	94	86	85	84	78	80	82	82	85·6
21	88	90	93	83	81	81	75	72	75	80	77	86	80·9
22	91	90	93	94	93	93	87	86	87	88	87	91	**89·8**
23	90	91	93	92	89	84	83	86	83	80	80	81	85·6
24	80	81	91	90	88	83	76	75	71	73	78	83	80·9
25	83	81	91	91	89	79	72	70	69	74	77	79	79·5
26	78	84	86	88	86	86	77	75	71	74	76	78	79·8
27	80	80	85	84	87	83	72	69	66	72	75	80	**77·6**
28	80	90	91	90	86	81	74	71	70	74	76	80	80·1
29	85	86	88	87	82	78	74	71	69	76	78	80	79·5
30	84	86	86	88	86	81	74	74	73	78	80	82	81·0
Mean.	84·1	85·5	86·5	86·9	86·1	83·6	80·5	78·7	77·2	79·8	81·5	83·2	82·8

Highest hourly value during September = 94
Lowest do. do. = 66

OCTOBER.

1	84	85	85	90	86	84	78	76	75	80	84	86	82·7
2	87	86	85	90	87	81	79	76	79	83	74	82	83·0
3	85	84	88	86	87	81	83	79	79	83	87	87	84·1
4	85	91	93	93	90	86	77	76	74	80	85	89	**85·1**
5	87	89	85	88	87	83	77	72	78	83	80	85	82·8
6	89	80	88	89	83	77	75	73	74	78	78	81	80·8
7	84	85	84	84	84	83	79	80	83	86	86	86	83·8
8	88	89	88	90	88	85	78	73	75	82	87	90	84·3
9	91	90	87	91	86	78	71	73	70	80	85	86	82·3
10	82	82	83	86	83	77	67	65	69	75	80	83	77·4
11	84	84	85	87	86	82	85	77	68	85	77	82	82·2
12	88	91	91	88	88	79	69	69	71	80	84	86	82·0
13	83	89	86	84	84	78	69	62	64	74	81	83	78·5
14	81	84	86	86	75	71	64	67	66	72	74	76	75·0
15	76	75	83	84	79	70	61	58	47	60	70	70	68·8
16	70	69	77	76	80	69	51	49	58	72	78	85	69·8
17	78	76	79	83	80	70	45	53	65	68	69	74	70·8
18	80	82	76	79	81	69	61	58	57	67	79	78	71·9
19	81	81	83	85	80	68	44	63	61	76	78	86	73·8
20	88	88	75	85	77	66	60	65	59	79	80	83	74·8
21	85	85	86	86	82	73	63	62	70	81	84	66	76·5
22	67	85	81	84	83	72	60	57	63	73	75	69	73·2
23	80	82	80	86	80	71	62	51	62	73	70	72	72·7
24	73	77	74	81	78	65	63	58	61	74	76	72	71·7
25	81	80	82	77	74	71	51	38	63	71	76	80	70·3
26	65	78	73	74	78	65	43	59	58	69	75	74	67·7
27	71	77	67	58	69	60	47	60	62	71	67	77	**65·8**
28	82	81	79	80	72	62	43	51	58	67	69	66	66·6
29	68	74	74	72	73	66	55	64	72	72	69	69	68·9
30	71	81	81	79	78	66	57	70	68	76	76	67	72·3
31	68	78	79	84	79	66	61	67	71	71	79	80	74·2
Mean.	80·1	82·8	82·0	83·4	81·2	73·0	63·8	64·9	67·1	75·5	77·8	79·0	75·9

Highest hourly value during October = 93
Lowest do. do. = 38

* Derived from 24 hourly values.

NOVEMBER. (THE FIGURES REPRESENT PERCENTAGES)

Date.	Hours.												Mean.*
	0	2	4	6	8	10	12	14	16	18	20	22	
1	83	75	83	82	84	79	64	60	67	78	82	77	75·8
2	82	81	80	75	56	55	46	54	61	67	66	74	66·1
3	74	80	67	73	58	48	38	57	63	62	63	71	62·7
4	72	76	70	64	54	51	39	55	66	73	72	74	64·3
5	80	79	80	75	73	47	39	62	67	67	75	69	67·3
6	69	73	76	75	81	76	71	69	71	75	75	76	73·7
7	78	80	77	80	77	73	71	68	73	78	80	83	76·5
8	84	86	88	89	82	78	68	67	73	80	82	80	**79·6**
9	79	81	80	80	79	73	67	72	79	83	83	82	78·3
10	82	85	84	88	82	75	64	68	71	79	82	78	78·2
11	81	84	84	79	78	73	70	67	71	77	78	82	76·9
12	82	83	83	84	78	72	66	65	69	74	78	80	76·0
13	82	73	78	77	78	73	62	51	49	52	55	58	65·5
14	59	63	62	71	72	63	52	58	62	69	64	53	62·0
15	66	67	66	74	70	63	49	40	51	64	72	72	62·4
16	68	70	77	74	73	68	57	49	58	66	70	73	66·4
17	73	75	77	79	74	68	53	39	55	64	61	67	65·5
18	64	68	71	78	73	62	52	40	42	61	66	59	62·0
19	69	70	70	68	57	53	39	32	41	53	63	62	56·5
20	69	63	68	51	54	47	46	35	44	54	64	65	**55·8**
21	68	70	73	75	69	50	32	42	42	55	66	62	58·0
22	70	68	75	75	70	51	42	49	55	64	65	69	62·5
23	61	69	74	70	71	66	59	69	77	79	80	84	71·7
24	83	87	85	86	84	71	59	65	70	80	81	82	77·6
25	80	78	82	79	81	71	65	70	77	78	80	81	76·6
26	82	83	82	82	81	65	59	54	66	75	74	74	72·8
27	80	78	78	81	76	66	59	52	72	79	76	74	72·6
28	82	83	78	84	82	67	55	62	70	75	74	76	73·6
29	75	77	76	80	75	66	50	60	65	69	70	61	68·5
30	67	65	69	72	63	60	44	39	51	68	68	70	61·7
Mean.	74·8	75·7	76·4	76·7	72·8	64·3	54·6	55·7	62·6	69·9	72·2	72·3	68·9

Highest hourly value during November = 89
Lowest do. do. = 32

DECEMBER.

1	81	74	66	69	67	65	53	47	43	75	72	69	66·1
2	81	75	68	80	60	56	51	45	52	64	76	60	63·5
3	71	72	80	70	66	57	52	50	64	67	68	60	64·3
4	74	71	72	73	72	63	54	57	58	72	72	68	67·3
5	73	73	70	77	80	67	51	59	62	74	80	75	70·3
6	71	86	83	82	76	67	60	50	57	68	75	74	71·2
7	80	79	79	83	81	68	59	59	59	59	68	60	68·7
8	65	67	67	72	73	67	47	48	59	67	73	77	64·7
9	71	85	85	80	76	69	65	63	53	61	66	73	70·7
10	73	73	76	80	76	67	65	61	62	68	70	73	70·8
11	76	84	85	85	82	77	63	64	64	64	67	74	**73·9**
12	79	80	83	84	81	72	61	59	62	65	67	66	71·2
13	66	73	75	76	79	71	67	63	62	71	72	72	70·6
14	73	72	80	67	78	63	45	40	49	60	57	59	61·4
15	56	59	51	67	66	56	46	50	55	65	69	71	58·9
16	74	80	75	78	71	67	51	54	59	69	72	76	68·6
17	67	76	74	74	77	64	58	55	60	67	64	68	66·8
18	61	60	54	75	68	62	60	53	56	64	72	69	63·0
19	75	76	74	75	75	69	55	41	53	65	77	82	68·7
20	83	80	83	82	80	71	59	60	62	67	74	81	73·6
21	74	71	73	82	83	75	62	57	60	71	74	83	72·0
22	78	78	79	83	83	68	66	63	57	71	70	71	72·9
23	72	78	81	84	85	88	67	48	44	49	55	52	66·3
24	58	56	66	70	71	62	48	49	49	62	54	53	58·6
25	56	60	58	58	54	49	39	31	56	65	68	68	55·2
26	53	46	51	56	55	47	33	29	50	64	74	73	**53·5**
27	79	65	66	61	63	52	43	35	49	52	66	71	58·1
28	54	64	68	73	61	59	34	31	41	57	69	68	57·7
29	62	74	72	71	66	63	39	49	57	64	66	57	62·6
30	71	64	65	65	65	55	30	40	55	64	71	62	58·9
31	65	74	76	68	70	56	43	59	84	88	90	88	72·2
Mean.	70·1	71·8	72·1	74·2	72·3	64·3	52·5	50·6	56·5	65.8	69·9	69·5	65·9

Highest hourly value during December = 90
Lowest do. do. = 28

* Derived from 24 hourly values.

(THE WHOLE SKY CLOUDY IS RECKONED AS 10.)

Date.	Hours of observation.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	6	4	0	0	1	0	3	10	10	6	4	2	2
	10	7	0	0	1	0	5	10	9	9	6	6	3
1	14	5	0	0	0	1	5	10	10	6	2	3	2
	16	8	0	0	0	0	9	10	10	9	2	2	1
	22	7	0	0	0	0	9	10	10	8	7	0	0
	6	3	0	0	0	0	9	7	10	8	1	4	1
	10	2	0	0	0	0	8	10	10	7	2	2	1
2	14	1	0	0	0	0	6	10	9	6	0	2	0
	16	1	0	0	0	0	9	10	10	8	1	3	0
	22	0	0	0	0	0	6	9	10	10	8	1	0
	6	0	0	0	0	0	5	7	10	7	8	2	1
	10	0	2	0	0	0	8	8	9	10	1	2	0
3	14	0	1	0	0	0	2	10	8	10	0	1	0
	16	0	0	0	0	0	1	10	10	10	1	4	0
	22	0	0	0	0	0	4	10	10	10	1	0	0
	6	0	0	2	4	4	6	10	9	8	0	2	0
	10	0	0	0	5	4	2	10	10	10	0	1	0
4	14	0	0	0	5	1	3	10	7	10	0	3	0
	16	0	0	0	9	2	5	10	8	10	2	6	0
	22	0	0	0	6	4	2	10	10	7	0	3	0
	6	0	0	0	7	4	1	10	10	8	1	2	0
	10	0	0	0	3	2	4	10	9	6	1	3	1
5	14	0	0	0	0	2	3	10	10	5	0	6	1
	16	0	0	0	0	2	4	10	10	7	0	10	1
	22	0	0	0	0	0	4	10	8	6	1	9	0
	6	3	0	0	4	2	6	10	9	5	2	10	1
	10	2	0	0	0	2	3	10	8	9	2	8	2
6	14	7	0	0	0	0	3	10	9	7	1	9	2
	16	7	0	0	0	0	4	10	10	6	1	10	2
	22	4	0	0	2	0	2	10	7	10	5	8	0
	6	1	0	0	4	2	2	7	8	10	6	7	0
	10	1	0	0	7	1	3	8	6	7	6	6	0
7	14	2	0	0	0	3	2	7	7	8	7	7	0
	16	2	0	0	0	1	6	6	8	6	5	6	0
	22	0	0	0	0	0	4	7	9	6	2	6	0
	6	5	0	0	4	1	6	7	9	8	6	4	0
	10	1	0	0	2	1	4	10	7	7	5	2	0
8	14	1	1	0	4	0	4	10	8	8	1	2	0
	16	1	3	0	2	0	3	8	8	5	1	3	0
	22	0	3	0	0	0	2	8	6	8	1	4	0
	6	4	0	0	0	2	8	8	10	10	2	7	0
	10	4	0	0	2	4	2	8	9	4	3	5	0
9	14	3	0	0	3	0	3	7	9	6	0	3	0
	16	2	0	0	2	0	3	9	10	5	1	3	0
	22	0	0	0	7	0	3	9	6	4	2	4	0
	6	7	0	0	5	2	9	8	10	7	4	4	0
	10	0	0	0	2	0	9	8	10	3	0	3	0
10	14	0	0	0	5	0	5	9	7	5	2	5	1
	16	1	0	0	0	0	5	4	9	2	2	4	0
	22	0	0	0	0	0	8	8	8	8	9	5	0
	6	1	0	0	6	3	3	8	9	10	6	7	0
	10	0	0	0	4	2	4	7	10	10	10	9	0
11	14	0	0	0	2	0	9	8	7	9	4	10	2
	16	0	0	0	2	0	6	6	10	6	5	9	1
	22	0	0	0	0	0	7	9	10	5	9	0	0
	6	0	0	0	4	1	5	10	10	5	6	6	1
	10	0	0	0	1	0	8	6	10	6	2	2	1
12	14	0	0	0	0	0	5	8	8	6	2	2	2
	16	0	0	0	0	0	4	8	8	7	1	1	2
	22	0	0	0	4	0	9	6	6	6	0	0	4
	6	0	2	0	3	3	5	10	8	4	1	0	4
	10	0	0	0	1	2	3	6	9	5	0	2	4
13	14	0	0	0	2	0	5	9	8	7	0	2	2
	16	0	0	0	6	0	5	7	9	9	0	1	1
	22	0	0	0	7	4	3	8	8	6	0	0	0
	6	0	1	0	7	4	10	10	10	8	1	0	0
	10	0	1	0	0	2	6	8	9	7	1	0	0
14	14	0	0	0	1	7	5	6	10	10	1	3	1
	16	0	2	0	3	8	10	7	10	10	1	2	1
	22	0	2	0	5	5	9	10	10	5	0	0	0

EXTENT OF CLOUDY SKY (*continued*), 1922.

(THE WHOLE SKY CLOUDY IS RECKONED AS 10.)

Date.	Hours of observation.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	6	0	6	0	7	8	10	10	10	7	1	0	0
	10	0	0	0	6	7	10	4	10	10	0	1	0
15	14	0	0	0	7	2	10	6	7	10	0	3	0
	16	0	2	0	5	3	10	9	10	10	0	3	0
	22	0	0	0	0	0	9	10	6	8	0	2	0
	6	0	3	0	5	5	10	9	7	8	0	0	0
	10	0	5	0	4	0	10	6	8	10	1	0	0
16	14	0	2	0	4	0	9	6	9	9	1	2	0
	16	0	2	0	0	0	9	7	8	10	1	1	0
	22	0	0	0	5	4	5	5	6	6	0	0	0
	6	0	1	0	4	2	5	7	6	9	4	0	0
	10	0	2	0	0	5	4	6	10	7	3	0	0
17	14	0	2	0	0	0	3	8	10	9	2	1	0
	16	0	1	0	0	0	3	8	10	10	3	0	0
	22	0	0	0	0	0	2	4	8	6	0	0	0
	6	0	8	0	3	2	2	10	6	5	1	0	0
	10	7	4	0	0	0	6	7	7	7	1	0	0
18	14	4	0	0	0	2	7	9	10	8	1	0	0
	16	6	0	0	0	3	7	8	10	9	2	0	0
	22	0	0	0	2	2	3	8	8	8	0	0	0
	6	3	3	0	3	9	8	9	6	6	2	0	0
	10	7	0	0	0	8	7	10	10	8	1	0	0
19	14	8	0	0	2	4	8	10	10	8	2	0	0
	16	8	0	0	2	4	6	10	10	6	1	0	0
	22	0	0	0	2	5	9	10	10	8	0	0	0
	6	0	6	0	4	5	10	10	10	10	2	0	0
	10	0	0	0	7	7	10	10	10	10	2	0	0
20	14	0	0	0	4	3	10	10	10	10	0	0	0
	16	0	0	0	4	1	10	10	10	8	0	0	0
	22	0	0	0	2	2	10	10	10	8	0	0	0
	6	6	0	0	4	5	8	10	10	10	3	0	0
	10	0	0	0	2	4	9	10	9	6	0	0	0
21	14	0	0	0	1	3	10	10	10	4	0	0	0
	16	0	0	0	2	2	10	10	6	5	0	0	0
	22	0	0	0	4	0	10	10	6	5	0	0	0
	6	0	0	0	4	4	10	10	10	10	3	0	0
	10	0	0	0	2	3	10	10	10	10	0	0	0
22	14	0	0	0	3	3	10	10	10	8	0	0	0
	16	0	0	0	7	2	10	10	10	8	0	0	0
	22	0	0	0	4	2	10	8	9	6	0	0	0
	6	0	0	0	3	7	10	10	9	6	0	0	5
	10	0	0	0	2	4	8	10	10	8	0	0	4
23	14	0	0	0	0	2	10	10	8	9	1	2	1
	16	0	0	0	0	3	8	10	10	8	0	1	1
	22	0	0	0	2	2	9	10	8	3	0	1	0
	6	0	0	6	7	6	10	10	7	6	2	1	0
	10	0	0	6	2	5	10	10	9	4	0	2	1
24	14	0	0	3	3	5	5	9	5	2	0	2	3
	16	0	0	1	6	7	6	10	7	2	0	3	0
	22	0	0	3	8	2	5	10	9	2	1	4	0
	6	0	0	9	7	4	10	10	8	2	6	2	0
	10	0	0	4	9	5	10	8	10	4	6	4	0
25	14	0	0	5	4	4	9	10	7	7	0	4	0
	16	0	0	6	3	4	10	10	10	4	0	5	0
	22	0	0	4	4	0	9	10	7	2	0	6	0
	6	0	0	6	8	3	10	10	5	8	1	3	0
	10	0	0	7	6	3	10	10	10	10	1	2	0
26	14	0	0	2	4	2	10	8	10	5	3	4	0
	16	0	0	4	3	3	10	9	10	6	3	2	0
	22	0	0	1	0	3	10	10	7	3	2	1	0
	6	0	6	5	5	2	8	10	10	6	2	2	0
	10	0	2	1	4	2	4	10	9	7	5	1	0
27	14	0	0	1	5	3	5	9	10	4	2	2	0
	16	0	1	1	2	2	8	10	10	2	1	2	0
	22	0	0	0	2	2	6	10	6	1	2	6	0
	6	0	0	0	8	6	10	9	10	9	4	4	0
	10	0	0	0	2	5	10	10	6	6	3	2	0
28	14	0	0	0	1	1	8	8	7	4	2	2	0
	16	0	0	1	1	2	10	10	9	3	2	3	0
	22	0	0	0	2	2	4	10	4	3	4	2	0

(THE WHOLE SKY CLOUDY IS RECKONED AS 10.)

Date.	Hours of observation.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	6	0		1	4	7	10	7	10	6	5	0	0
	10	0		1	5	8	10	10	6	8	4	0	1
29	14	0		0	2	2	10	10	10	2	5	3	3
	16	0		1	1	2	10	10	8	1	5	2	5
	22	0		0	2	2	9	9	7	0	6	0	5
	6	0		3	1	3	10	10	8	0	3	0	3
	10	0		2	4	5	10	10	6	3	5	1	5
30	14	0		2	0	2	10	9	7	1	6	1	3
	16	0		1	0	1	10	10	9	4	4	1	2
	22	0		0	0	4	9	7	7	10	6	0	4
	6	0		1		2		5	8		10		3
	10	0		0		3		10	8		8		5
31	14	0		0		4		10	8		9		7
	16	0		0		5		10	6		10		5
	22	0		0		2		10	8		7		0
Mean.		0·9	0·5	0·6	2·7	2·3	6·8	8·9	8·6	6·7	2·3	2·4	0·7

TEMPERATURE OF THE GROUND, 1922.

Month.	In shade at the depths of										Exposed to the sun at the depths of			
	1 Inch.		9 Inches.		20 Inches.		60 Inches.		132 Inches.		1 Inch		8 Inches.	
	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.
	°	°	°	°	°	°	°	°	°	°	°	°	°	°
January ..	**77·0**	−5·2	**78·6**	−4·7	82·6	−3·3	84·1	−1·7	83·8	−0·5	88·1	−3·6	**79·7**	−6·9
February ..	78·5	−3·7	79·1	−4·2	**82·0**	−3·9	**83·3**	−2·5	**83·3**	−1·0	92·7	+1·0	82·0	−4·6
March ..	81·6	−0·6	81·2	−2·1	84·0	−1·9	83·8	−2·0	83·7	−0·6	97·6	+5·9	88·0	+1·4
April ..	85·3	+3·1	85·5	+2·2	86·2	+0·3	85·1	−0·7	84·6	+0·3	103·1	+11·4	95·4	+8·8
May ..	**87·4**	+5·2	**87·9**	+4·6	89·0	+3·1	86·9	+1·1	85·0	+0·7	**106·7**	+15·0	**100·5**	+13·9
June ..	85·2	+3·0	87·3	+4·0	**90·2**	+4·3	**88·5**	+2·7	**85·5**	+1·2	89·8	−1·9	89·9	+3·3
July ..	82·7	+0·5	84·7	+1·4	87·7	+1·8	87·7	+1·9	85·0	+0·7	83·6	−8·1	83·9	−2·7
August ..	81·8	−0·4	83·7	+0·4	86·4	+0·5	86·5	+0·7	84·5	+0·2	**88·4**	−8·3	83·9	−2·7
September ..	81·5	−0·7	83·4	+0·1	85·8	−0·1	85·9	+0·1	84·0	−0·3	84·5	−7·2	83·9	−2·7
October ..	84·0	+1·8	84·6	+1·3	86·5	+0·6	86·4	+0·6	84·4	+0·1	93·6	+1·9	85·8	−0·8
November ..	82·9	+0·7	83·9	+0·6	86·6	+0·7	86·5	+0·7	84·6	+0·3	91·0	−0·7	84·5	−2·1
December ..	78·3	−3·9	80·2	−3·1	84·4	−1·5	85·2	−0·6	83·4	−0·9	86·6	−5·1	81·2	−5·4
Year.	82·2	..	83·3	..	85·9	..	85·8	..	84·3	..	91·7	..	86·6	..

The following tables give the diurnal variation of D, H, Z, X, Y, I and F for each month based on the hourly tabulations for the 5 international quiet days. The days are reckoned from 4h 51m to 4h 51m of the local mean time corresponding to the Greenwich civil day 0 h to 24 h.

The variations in X, Y, I and F were computed from the variations in D, H and Z by means of the formulae : —

$$\Delta X = 1{\cdot}000\ \Delta H - 0{\cdot}039\ \Delta D$$
$$\Delta Y = 0{\cdot}004\ \Delta H + 10{\cdot}755\ \Delta D$$
$$\Delta I = 0{\cdot}077\ \Delta Z - 0{\cdot}036\ \Delta H$$
$$\Delta F = 0{\cdot}424\ \Delta Z + 0{\cdot}906\ \Delta H$$

A plus sign indicates an hourly value greater than the mean for the day.

Mean results are also given for groups of four months, as indicated by the Roman numerals at the head of the columns :—I January, February, November, December ; II March, April, September, October ; III May, June, July, August.

All diurnal inequalities have been given uncorrected for the aperiodic change ; the values of the elements for the initial and the terminal hours have however been given to enable the corrections to be determined and applied, if required.

DIURNAL VARIATION OF D, 1922.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	−0·3	−0·1	−0·2	−0·1	+0·4	+0·7	+0·9	+0·7	+0·4	−0·1	−0·3	−0·3	−0·3	0·0	+0·7	+0·1
1	−0·5	−0·2	−0·2	+0·1	+1·1	+1·4	+1·5	+1·4	+0·8	−0·1	−0·5	−0·3	−0·3	+0·1	+1·3	+0·4
2	−0·6	0·0	+0·3	+1·2	+2·1	+2·2	+2·3	+2·0	+1·5	+0·4	−0·7	−0·4	−0·4	+0·9	+2·1	+0·9
3	0·0	0·0	+1·1	+1·9	+2·5	+2·3	+2·3	+1·9	+1·8	+1·2	−0·2	−0·3	−0·1	+1·5	+2·2	+1·2
4	+0·9	−0·2	+1·4	+1·7	+1·9	+1·6	+1·5	+0·8	+1·0	+1·2	+0·1	−0·3	+0·1	+1·3	+1·5	+1·0
5	+0·5	−0·6	+1·3	+1·2	+0·5	+0·3	+0·4	−0·2	−0·5	+0·4	+0·2	−0·4	−0·1	+0·6	+0·2	+0·3
6	−0·4	−0·9	+0·4	0·0	−0·9	−1·0	−0·9	−1·3	−1·9	−0·7	−0·1	−0·6	−0·5	−0·5	−1·0	−0·7
7	−0·9	−1·2	−0·7	−1·1	−2·0	−2·2	−1·8	−2·0	−2·5	−1·3	−0·3	−1·0	−0·8	−1·4	−2·0	−1·4
8	−0·5	−0·6	−1·3	−1·6	−2·3	−2·7	−2·1	−1·8	−2·3	−1·4	−0·1	−0·6	−0·5	−1·7	−2·2	−1·5
9	0·0	+0·3	−1·1	−1·2	−1·8	−2·3	−1·7	−1·3	−1·5	−0·8	+0·2	−0·2	+0·1	−1·2	−1·8	−1·0
10	+0·3	+0·9	−0·2	−0·7	−1·2	−1·4	−1·4	−0·4	−0·4	−0·1	+0·3	+0·4	+0·5	−0·3	−1·1	−0·3
11	+0·6	+1·1	+0·4	0·0	−0·5	−0·5	−0·8	+0·4	+0·3	+0·5	+0·5	+0·7	+0·8	+0·3	−0·4	+0·2
12	+0·5	+0·9	+0·4	+0·3	−0·2	0·0	−0·3	+0·6	+0·5	+0·2	+0·4	+0·7	+0·6	+0·4	0·0	+0·3
13	+0·2	+0·3	−0·1	+0·1	−0·1	+0·2	−0·1	+0·3	+0·2	0·0	+0·3	+0·5	+0·3	+0·1	+0·1	+0·1
14	+0·2	+0·1	−0·3	−0·2	−0·3	−0·1	−0·3	−0·2	0·0	−0·1	+0·1	+0·5	+0·2	−0·1	−0·2	−0·1
15	+0·1	+0·1	−0·1	−0·3	−0·3	−0·3	−0·4	−0·3	−0·1	−0·1	+0·1	+0·4	+0·2	−0·2	−0·3	−0·1
16	+0·1	+0·1	−0·1	−0·3	−0·2	−0·2	−0·3	−0·4	0·0	−0·1	0·0	+0·3	+0·1	−0·1	−0·3	−0·1
17	0·0	+0·1	−0·2	−0·3	0·0	−0·1	−0·3	−0·3	+0·2	0·0	0·0	+0·3	+0·1	−0·1	−0·2	−0·1
18	+0·1	+0·1	−0·1	−0·2	+0·1	+0·1	−0·1	−0·2	+0·2	+0·1	+0·1	+0·3	+0·1	0·0	0·0	0·0
19	0·0	0·0	−0·1	−0·1	+0·1	+0·3	+0·1	−0·1	+0·4	+0·3	+0·1	+0·3	+0·1	+0·1	+0·1	+0·1
20	0·0	+0·1	−0·1	0·0	+0·3	+0·4	+0·3	+0·1	+0·5	+0·2	+0·1	+0·1	+0·1	+0·1	+0·3	+0·2
21	−0·1	0·0	−0·1	0·0	+0·3	+0·4	+0·4	+0·1	+0·5	+0·1	0·0	+0·1	0·0	+0·1	+0·3	+0·1
22	−0·1	−0·1	−0·2	0·0	+0·3	+0·5	+0·4	+0·2	+0·5	+0·1	−0·1	0·0	−0·1	+0·1	+0·3	+0·1
23	−0·3	−0·2	−0·2	−0·1	+0·3	+0·5	+0·4	+0·3	+0·5	0·0	−0·2	−0·2	−0·2	+0·1	+0·4	+0·1
24	−0·4	−0·2	−0·3	0·0	+0·4	+0·7	+0·7	+0·5	+0·4	−0·1	−0·4	−0·3	−0·3	0·0	+0·6	+0·1

(INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.)

Hour.	Jan.	Feb.	Mar.	Apr.	May	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	− 8	− 6	− 8	−14	−10	−13	−11	− 8	− 3	− 8	− 9	− 7	− 7	− 8	−11	− 9
1	− 7	− 5	− 8	−12	− 8	−11	− 8	− 9	− 4	− 7	− 8	− 3	− 6	− 8	− 9	− 7
2	− 3	− 3	− 7	− 9	− 5	− 5	− 5	− 9	− 9	− 4	− 2	− 1	− 2	− 7	− 6	− 5
3	+ 1	+ 2	− 3	− 1	+ 3	+ 1	0	− 7	− 9	+ 1	+ 4	+ 2	+ 2	− 3	− 1	− 1
4	+ 3	+10	+11	+13	+13	+ 7	+ 6	+ 1	− 2	+ 5	+11	+ 5	+ 7	+ 7	+ 7	+ 7
5	+ 8	+17	+21	+30	+23	+16	+15	+ 9	+ 7	+13	+21	+12	+15	+18	+15	+16
6	+14	+22	+32	+38	+28	+25	+23	+11	+13	+23	+28	+17	+20	+27	+21	+23
7	+17	+22	+33	+32	+26	+28	+24	+13	+16	+27	+26	+18	+21	+27	+22	+23
8	+15	+17	+26	+23	+19	+25	+22	+12	+15	+21	+17	+12	+15	+21	+20	+19
9	+ 9	+ 9	+15	+13	+11	+17	+14	+ 9	+ 8	+11	+ 8	+ 4	+ 7	+12	+12	+11
10	+ 5	+ 1	+ 3	+ 6	+ 4	+ 7	+ 5	+ 4	+ 3	+ 3	+ 3	+ 1	+ 2	+ 4	+ 5	+ 4
11	0	− 5	− 6	− 1	0	− 3	0	+ 3	− 2	− 1	− 3	− 3	− 3	− 3	0	− 2
12	− 3	−10	− 9	− 6	− 5	− 9	− 5	+ 1	− 2	− 2	− 6	− 5	− 6	− 5	− 5	− 5
13	− 3	−11	− 7	− 8	− 7	−11	− 6	0	− 3	− 3	− 8	− 7	− 7	− 5	− 6	− 6
14	− 5	−10	− 8	− 9	− 8	−10	− 7	− 1	− 5	− 6	−10	− 6	− 7	− 7	− 6	− 7
15	− 4	−11	−11	−10	− 9	−10	− 8	− 2	− 5	− 9	−11	− 5	− 8	− 9	− 7	− 8
16	− 5	−10	−13	−12	−10	− 9	− 8	− 5	− 5	−10	−10	− 6	− 8	−10	− 8	− 9
17	− 5	−11	−13	−11	−11	− 7	− 8	− 5	− 5	−10	− 9	− 5	− 7	−10	− 8	− 9
18	− 4	−10	−12	−12	−10	− 7	− 8	− 4	− 2	− 9	−10	− 4	− 7	− 9	− 7	− 8
19	− 5	− 7	−10	−11	− 9	− 8	− 8	− 1	− 4	−11	− 8	− 5	− 6	− 9	− 7	− 7
20	− 5	− 5	− 9	−12	−10	− 8	− 7	− 3	− 2	− 7	− 8	− 3	− 5	− 8	− 7	− 7
21	− 6	− 1	− 8	−13	− 9	− 5	− 7	− 3	− 1	− 7	− 7	− 4	− 5	− 7	− 6	− 6
22	− 4	0	− 5	−10	− 9	− 4	− 6	− 3	− 1	− 5	− 7	− 5	− 4	− 5	− 6	− 5
23	− 6	+ 2	− 5	− 8	− 9	− 6	− 6	− 3	− 1	− 7	− 6	− 4	− 3	− 5	− 6	− 5
24	− 3	+ 1	− 3	− 7	− 6	− 5	− 5	− 3	+ 1	− 4	− 5	− 3	− 3	− 3	− 5	− 4

DIURNAL VARIATION OF X, 1922.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	− 8	− 6	− 8	−14	−10	−13	−11	− 8	− 3	− 8	− 9	− 7	− 7	− 8	−11	− 9
1	− 7	− 5	− 8	−12	− 8	−11	− 8	− 9	− 4	− 7	− 8	− 3	− 6	− 8	− 9	− 7
2	− 3	− 3	− 7	− 9	− 5	− 5	− 5	− 9	− 9	− 4	− 2	− 1	− 2	− 7	− 6	− 5
3	+ 1	+ 2	− 3	− 1	+ 2	+ 1	− 1	− 8	− 9	+ 1	+ 4	+ 2	+ 2	− 3	− 1	− 1
4	+ 3	+10	+11	+13	+13	+ 7	+ 6	+ 1	− 2	+ 5	+11	+ 5	+ 7	+ 7	+ 7	+ 7
5	+ 8	+17	+21	+30	+23	+16	+15	+ 9	+ 7	+13	+21	+12	+15	+18	+15	+16
6	+14	+22	+32	+38	+28	+25	+23	+11	+14	+23	+28	+17	+20	+27	+21	+23
7	+17	+22	+33	+32	+26	+26	+24	+13	+16	+27	+26	+18	+21	+27	+22	+23
8	+15	+17	+26	+23	+19	+25	+22	+12	+15	+21	+17	+12	+15	+21	+20	+19
9	+ 9	+ 9	+15	+13	+11	+17	+14	+ 9	+ 8	+11	+ 8	+ 4	+ 7	+12	+13	+11
10	+ 5	+ 1	+ 3	+ 6	+ 5	+ 7	+ 5	+ 4	+ 3	+ 3	− 3	+ 1	+ 1	− 4	+ 5	+ 1
11	0	− 5	− 6	− 1	0	− 3	0	+ 3	− 2	− 1	− 3	− 3	− 3	− 3	0	− 2
12	− 3	−10	− 9	− 6	− 5	− 9	− 5	+ 1	− 2	− 2	− 6	− 5	− 6	− 5	− 5	− 5
13	− 3	−11	− 7	− 8	− 7	−11	− 6	0	− 3	− 3	− 8	− 7	− 7	− 5	− 6	− 6
14	− 5	−10	− 8	− 9	− 8	−10	− 7	− 1	− 5	− 6	−10	− 6	− 7	− 7	− 6	− 7
15	− 4	−11	−11	−10	− 9	−10	− 8	− 2	− 5	− 9	−11	− 5	− 8	− 9	− 7	− 8
16	− 5	−10	−13	−12	−10	− 9	− 8	− 5	− 5	−10	−10	− 6	− 8	−10	− 8	− 9
17	− 5	−11	−13	−11	−11	− 7	− 8	− 5	− 5	−10	− 9	− 5	− 7	−10	− 8	− 9
18	− 4	−10	−12	−12	−10	− 7	− 8	− 4	− 2	− 9	−10	− 4	− 7	− 9	− 7	− 8
19	− 5	− 7	−10	−11	− 9	− 8	− 8	− 1	− 4	−11	− 8	− 5	− 6	− 9	− 7	− 7
20	− 5	− 5	− 9	−12	−10	− 8	− 7	− 3	− 2	− 7	− 8	− 3	− 5	− 8	− 7	− 7
21	− 6	− 1	− 8	−13	− 9	− 5	− 7	− 3	− 1	− 7	− 7	− 4	− 5	− 7	− 6	− 6
22	− 4	0	− 5	−10	− 9	− 4	− 6	− 3	− 1	− 5	− 7	− 5	− 4	− 5	− 6	− 5
23	− 6	+ 2	− 5	− 8	− 9	− 6	− 6	− 3	− 1	− 7	− 6	− 4	− 3	− 5	− 6	− 5
24	− 3	+ 1	− 3	− 7	− 6	− 5	− 5	− 3	+ 1	− 4	− 5	− 3	− 3	− 3	− 5	− 4

DIURNAL VARIATION OF Y, 1922.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group Means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	− 3	− 1	− 2	− 1	+ 4	+ 7	+10	+ 7	+ 5	− 1	− 3	− 3	− 3	0	+ 7	+ 2
1	− 5	− 2	− 3	+ 1	+11	+15	+16	+15	+ 8	− 1	− 5	− 3	− 4	+ 1	+15	+ 4
2	− 7	0	+ 3	+13	+23	+23	+25	+22	+16	+ 5	− 8	− 4	− 5	+ 9	+23	+ 9
3	0	0	+12	+20	+27	+24	+25	+20	+19	+13	− 3	− 4	− 2	+16	+24	+13
4	+10	− 3	+15	+19	+21	+17	+17	+ 8	+11	+13	+ 1	− 3	+ 1	+14	+16	+10
5	+ 6	− 6	+14	+13	+ 5	+ 3	+ 4	− 3	− 6	+ 4	+ 2	− 4	− 1	+ 6	+ 3	+ 3
6	− 4	−10	+ 5	0	− 9	−11	− 9	−15	−20	− 7	− 1	− 7	− 5	− 5	−11	− 7
7	− 9	−13	− 8	−12	−21	−24	−20	−21	−27	−14	− 3	−10	− 9	−15	−21	−15
8	− 5	− 7	−14	−17	−25	−29	−22	−19	−25	−15	− 1	− 7	− 5	−18	−24	−16
9	0	+ 3	−12	−13	−20	−25	−19	−14	−16	− 9	+ 2	− 2	+ 1	−12	−19	−10
10	+ 3	+ 9	− 2	− 8	−13	−15	−15	− 4	− 5	− 1	+ 4	+ 4	+ 5	− 4	−12	− 3
11	+ 7	+12	+ 4	0	− 6	− 6	− 8	+ 4	+ 4	+ 6	+ 6	+ 8	+ 8	+ 3	− 4	+ 3
12	+ 6	+ 9	+ 5	+ 3	− 3	0	− 3	+ 7	+ 6	+ 3	+ 4	+ 7	+ 7	+ 4	0	+ 3
13	+ 2	+ 3	− 1	+ 1	− 1	+ 2	− 1	+ 3	+ 2	0	+ 3	+ 6	+ 3	+ 1	+ 1	+ 2
14	+ 2	+ 1	− 3	− 3	− 3	− 1	− 3	− 3	0	− 1	+ 1	+ 5	+ 3	− 2	− 3	− 1
15	+ 1	+ 1	− 2	− 4	− 3	− 3	− 4	− 4	− 1	− 1	+ 1	+ 4	+ 2	− 2	− 3	− 1
16	+ 1	+ 2	− 1	− 3	− 2	− 3	− 3	− 4	0	− 1	0	+ 3	+ 1	− 1	− 3	− 1
17	0	+ 1	− 2	− 3	0	− 1	− 3	− 4	+ 2	0	0	+ 3	+ 1	− 1	− 2	− 1
18	+ 1	+ 1	− 1	− 2	+ 1	+ 1	− 1	− 2	+ 2	+ 1	+ 1	+ 3	+ 1	0	0	0
19	0	0	− 1	− 1	+ 1	+ 3	+ 1	− 1	+ 4	+ 3	+ 2	+ 3	+ 1	+ 1	+ 1	+ 1
20	0	+ 1	− 1	0	+ 3	+ 5	+ 3	+ 1	+ 5	+ 2	+ 1	+ 1	+ 1	+ 1	+ 3	+ 2
21	− 1	0	− 1	0	+ 3	+ 5	+ 4	+ 1	+ 6	+ 1	0	+ 1	0	+ 1	+ 3	+ 2
22	− 2	− 1	− 2	0	+ 3	+ 5	+ 5	+ 2	+ 6	+ 1	− 1	0	− 1	+ 1	+ 4	+ 1
23	− 3	− 2	− 3	− 1	+ 3	+ 5	+ 4	+ 3	+ 5	0	− 3	− 2	− 2	+ 1	+ 4	+ 1
24	− 4	− 2	− 3	0	+ 5	+ 8	+ 7	+ 5	+ 4	− 1	− 4	− 3	− 3	0	+ 6	+ 1

DIURNAL VARIATION OF Z, 1922.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	−1	−3	−2	0	+4	+8	+9	+8	+3	+3	+3	−1	−1	+1	+8	+3
1	−1	−2	−1	+2	+8	+12	+13	+12	+7	+5	+3	0	0	+3	+11	+5
2	0	−1	+4	+6	+9	+11	+14	+11	+10	+9	+3	0	+1	+7	+11	+6
3	+7	−5	+1	0	+3	+3	+6	+3	0	+8	+7	0	+2	+2	+4	+3
4	+5	−9	−4	−9	−10	−5	−3	−8	−13	−1	+6	−1	+1	−7	−7	−4
5	−8	−10	−8	−15	−20	−14	−12	−16	−21	−13	+2	−2	−4	−14	−15	−11
6	−12	−10	−15	−22	−24	−20	−17	−18	−24	−17	−2	−6	−7	−19	−20	−15
7	−10	−5	−17	−22	−21	−21	−18	−14	−17	−14	−1	−7	−6	−17	−18	−14
8	−2	+3	−13	−13	−12	−15	−11	−6	−5	−3	+2	−3	0	−9	−11	−7
9	+3	+9	−2	−3	−5	−6	−5	−2	+5	+4	+3	0	+4	−1	−5	−1
10	+6	+9	+5	+2	+1	+4	−2	+5	+10	+6	+2	+5	+5	+6	+2	+4
11	+5	+6	+6	+4	+4	+7	+3	+5	+6	+4	0	+4	+4	+5	+5	+5
12	+2	0	+1	+3	+4	+6	+5	+1	+1	0	−2	+2	+1	+1	+4	+2
13	+1	−1	−1	+2	+3	+4	+3	−1	0	−1	−2	+1	0	0	+2	+1
14	+2	+1	+1	0	+1	+1	0	−1	0	0	−3	+1	0	0	0	0
15	+2	+1	+3	+2	+4	+3	0	−1	+1	+1	−1	+1	+1	+2	+1	+1
16	+1	+2	+3	+5	+5	+3	+1	+1	+3	+2	−2	+1	+1	+3	+2	+2
17	+1	+2	+4	+6	+6	+4	+2	+1	+4	+2	−2	+1	+1	+4	+3	+3
18	+1	+3	+5	+7	+7	+4	+3	+3	+5	+1	−1	+1	+1	+5	+4	+3
19	+1	+2	+6	+8	+7	+4	+4	+3	+6	+2	−1	+1	+1	+5	+4	+3
20	+1	+2	+6	+9	+7	+3	+3	+4	+5	+1	−2	0	0	+5	+4	+3
21	−1	+2	+6	+8	+7	+3	+2	+3	+5	+1	−3	0	−1	+5	+4	+3
22	−1	+2	+5	+8	+6	+2	+2	+3	+4	+1	−3	0	−1	+5	+3	+3
23	−2	+1	+6	+8	+7	+2	+2	+4	+3	0	−3	+1	−1	+5	+4	+3
24	−1	+1	+6	+9	+7	+3	+4	+5	+4	+1	−3	+1	−1	+5	+5	+3

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group Means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	+0·2	0	+0·2	+0·5	+0·7	+1·1	+1·1	+0·9	+0·4	+0·5	**+0·5**	+0·1	+0·2	+0·4	+0·9	+0·5
1	+0·2	+0·1	+0·2	+0·5	**+0·9**	**+1·3**	**+1·3**	**+1·2**	+0·7	+0·6	+0·5	+0·1	+0·2	+0·5	**+1·2**	+0·6
2	+0·1	0	+0·6	+0·8	+0·9	+1·0	+1·2	+1·1	**+1·0**	**+0·8**	+0·3	0	+0·1	**+0·8**	+1·1	**+0·7**
3	**+0·5**	−0·5	+0·2	0	+0·1	+0·3	+0·4	+0·5	+0·3	+0·6	+0·4	−0·1	+0·1	+0·3	+0·3	+0·2
4	+0·3	−1·1	−0·7	−1·2	−1·3	−0·6	−0·4	−0·6	−0·9	−0·3	+0·1	−0·3	−0·3	−0·8	−0·7	−0·6
5	−0·9	−1·3	−1·3	−2·3	−2·4	−1·7	−1·4	−1·5	−1·9	−1·5	−0·5	−0·6	−0·8	−1·7	−1·7	−1·4
6	**−1·4**	**−1·6**	−2·3	**−3·1**	**−2·8**	**−2·5**	−2·1	**−1·8**	**−2·3**	**−2·1**	**−1·2**	−1·0	**−1·3**	**−2·5**	**−2·3**	**−2·0**
7	−1·4	−1·2	**−2·5**	−2·8	−2·6	−2·5	**−2·3**	−1·5	−1·9	−2·1	−1·0	**−1·1**	−1·2	−2·3	−2·2	−1·9
8	−0·6	−0·3	−1·9	−1·8	−1·6	−2·1	−1·7	−0·9	−0·9	−1·1	−0·5	−0·6	−0·5	−1·4	−1·6	−1·2
9	−0·1	+0·4	−0·7	−0·7	−0·8	−1·1	−0·9	−0·4	+0·1	−0·1	−0·1	−0·1	0	−0·3	−0·8	−0·4
10	+0·3	+0·7	+0·3	0	−0·1	+0·1	−0·4	+0·3	+0·7	+0·4	0	+0·2	+0·3	+0·3	0	+0·2
11	+0·4	+0·6	+0·6	+0·3	+0·3	+0·6	+0·2	+0·3	+0·6	+0·3	+0·1	**+0·4**	**+0·4**	+0·5	+0·3	+0·4
12	+0·3	+0·4	+0·3	+0·4	+0·5	+0·8	+0·6	+0·1	+0·2	+0·1	0	+0·3	+0·3	+0·3	+0·5	+0·4
13	+0·2	+0·3	+0·2	+0·4	+0·4	+0·7	+0·4	−0·1	+0·1	0	+0·2	+0·3	+0·3	+0·2	+0·3	+0·3
14	+0·3	**+0·5**	+0·4	+0·3	+0·3	+0·5	+0·3	−0·1	+0·2	+0·2	+0·1	+0·3	**+0·3**	+0·3	+0·3	+0·3
15	+0·2	+0·5	+0·6	+0·5	+0·6	+0·6	+0·3	+0·1	+0·3	+0·4	+0·3	+0·3	+0·3	+0·5	+0·4	+0·4
16	+0·3	+0·5	+0·7	+0·8	+0·7	+0·5	+0·4	+0·2	+0·5	+0·5	+0·3	+0·3	+0·3	+0·6	+0·5	+0 5
17	+0·3	+0·5	+0·8	+0·9	+0·9	+0·6	+0·5	+0·3	+0·5	+0·5	+0·2	+0·3	+0·3	+0·7	+0·6	+0·5
18	+0·3	+0·5	+0·8	+0·9	+0·9	+0·5	+0·6	+0·4	+0·5	+0·4	+0·2	+0·3	+0·3	+0·7	+0·6	+0·5
19	+0·3	+0·4	**+0·9**	+1·0	+0·8	+0·6	+0·6	+0·2	+0·5	+0·5	+0·2	+0·3	+0·3	+0·7	+0·5	+0·5
20	+0·2	+0·3	+0·8	**+1·1**	+0·9	+0·6	+0·5	+0·4	+0·5	+0·4	+0·1	+0·1	+0·2	+0·7	+0·6	+0·5
21	+0·1	+0·1	+0·7	+1·1	+0·8	+0·4	+0·5	+0·3	**+0·4**	+0·3	0	+0·1	+0·1	+0·6	+0·5	+0·4
22	0	+0·1	+0·6	+0·9	+0·8	+0·4	+0·3	+0·3	+0·4	+0·3	0	+0·2	+0·1	+0·5	+0·5	+0·4
23	+0·1	0	+0·7	+0·9	+0·8	+0·4	+0·3	+0·4	+0·3	+0·2	0	+0·1	+0·1	+0·5	+0·5	+0·4
24	0	0	+0·5	+1·0	+0·8	+0·5	+0·5	+0·5	+0·3	+0·3	0	+0·2	+0·1	+0·5	+0·6	+0·4

DIURNAL VARIATION OF F, 1922.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

Hour.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group Means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	−8	−7	−8	**−12**	−7	**−9**	−6	−4	−1	−6	−7	**−7**	**−7**	**−7**	**−6**	**−7**
1	−7	−5	−8	−10	−4	−5	−2	−3	0	−4	−6	−3	−5	−5	−3	−5
2	−3	−3	−5	−5	0	0	+1	−3	−4	0	−1	−1	−2	−3	−1	−2
3	+4	0	−2	−1	+3	+2	+2	**−5**	−8	+4	+7	+1	+3	−2	+1	+1
4	+5	+6	+8	+8	+8	+4	+4	−3	−7	+4	+13	+5	+7	+3	+3	+5
5	+4	+11	+15	+21	+12	+8	+9	+1	−2	+6	+20	+10	+11	+10	+7	+10
6	+7	+16	**+23**	**+25**	**+15**	+14	+13	+2	+2	+13	**+25**	**+13**	+15	+16	+11	**+14**
7	+11	**+18**	+23	+20	+15	+15	+14	+6	+7	**+18**	+23	+13	**+16**	**+17**	+12	**+15**
8	**+13**	+17	+18	+15	+12	**+17**	**+15**	**+8**	**+11**	+17	+16	+10	+14	+15	**+13**	+14
9	+9	+12	**+13**	+10	+7	**+13**	+10	+7	+9	+12	+8	+4	+8	+11	+9	+9
10	+7	+4	+5	+6	+5	+7	+3	+5	+7	+6	+3	+3	+4	+6	+5	+5
11	+2	−2	−3	+1	+2	0	+2	+5	+1	+1	−3	−1	−1	0	+2	0
12	−2	−9	−8	−5	−3	−5	−3	+1	−1	−2	−6	−4	−5	−4	−3	−4
13	−3	**−11**	−7	−6	−5	−9	−5	−1	−3	−3	−8	−6	−7	−5	−5	−5
14	−3	−9	−7	−8	−7	−9	**−7**	−1	−5	−5	**−10**	−5	−7	−6	−6	−6
15	−3	−10	−9	−8	−6	−8	−7	−3	−4	−8	−10	−4	−7	−7	−6	−7
16	−4	−9	**−11**	−9	−7	−7	−7	−4	−3	−8	−10	−5	−7	−7	−6	−7
17	−4	−9	−10	−7	−8	−5	−6	−5	−3	**−9**	−9	−4	−7	−7	−6	−7
18	−3	−8	−8	−7	−6	−5	−6	−3	0	−7	−9	−3	−6	−6	−5	−5
19	−4	−6	−7	−7	−5	−6	−6	+1	−1	−9	−8	−4	−5	−6	−4	−5
20	−5	−3	−5	−7	−6	−6	−5	−1	+1	−7	−8	−3	−5	−5	−4	−5
21	−6	−1	−5	−8	−5	−3	−6	−2	+1	−6	−7	−3	−4	−4	−4	−4
22	−4	+1	−3	−5	−6	−3	−5	−1	0	−5	−7	−4	−4	−3	−4	−3
23	−6	+2	−2	−3	−5	−4	−5	−1	+1	−6	−6	−3	−3	−3	−4	−3
24	−3	+2	−1	−3	−3	−3	−3	−1	+2	−3	−6	−2	−3	−1	−2	−2

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Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1	14·1	13·7	13·5	13·0	12·6	13·4	13·6	14·1	15·0	14·1	13·9	14·1	13·8	15 40	15·0	7 8	12·4
2	13·9	13·8	13·4	12·9	12·9	13·5	13·4	14·0	14·4	13·9	14·1	13·7	13·7	15 32	14·4	7 28	12·5
3†	14·0	14·1	13·8	13·1	13·1	13·9	13·7	14·8	14·8	14·2	14·0	13·7	13·9	14 54	15·0	7 8	12·6
4†	13·7	13·6	13·4	13·3	13·0	14·0	14·2	14·4	14·4	14·0	13·9	13·8	13·8	12 44	14·4	6 48	12·5
5	13·9	13·9	13·6	13·3	12·5	13·2	12·5	13·7	14·2	14·3	14·2	14·0	13·7	16 58	14·4	7 44	12·5
6	14·3	14·1	13·4	13·1	13·1	14·2	13·5	12·8	12·9	14·0	14·0	14·3	13·6	23 28	14·5	14 56	12·1
7	14·3	13·6	12·9	12·6	11·1	14·1	14·2	14·4	14·5	14·9	14·8	14·3	13·8	17 0	15·1	7 46	11·1
8	14·1	13·7	13·6	13·4	13·6	14·0	12·3	12·7	14·0	14·3	14·4	14·5	13·7	23 16	14·9	12 40	11·7
9	14·5	14·4	13·4	12·7	13·1	14·5	13·7	14·5	14·9	14·6	14·9	14·3	14·1	15 32	15·3	5 51	12·7
10	13·9	13·9	13·7	12·9	13·1	14·6	14·2	13·9	14·5	14·7	14·5	14·1	14·0	14 56	14·9	6 20	12·5
11	13·6	13·6	13·2	13·1	13·3	14·0	15·5	14·7	14·9	14·9	14·1	13·9	14·0	12 24	15·8	7 0	12·2
12	14·0	13·9	13·6	13·0	12·5	14·0	14·9	15·9	14·5	13·9	14·1	14·3	14·0	14 12	16·0	6 56	12·0
13	14·1	13·8	13·3	12·7	12·7	14·1	14·3	15·8	13·6	14·0	14·2	14·0	13·9	13 51	15·8	5 52	12·4
14	14·5	14·3	13·6	13·1	12·6	13·5	12·9	13·5	14·1	14·3	14·1	13·9	13·7	17 0	14·6	7 20	12·5
15†	13·7	13·8	13·5	13·2	13·5	14·1	12·9	14·2	14·1	13·8	14·0	13·9	13·7	9 8	14·5	11 28	12·7
16	13·9	13·7	13·5	12·8	12·5	13·7	13·1	14·4	13·7	13·5	13·6	14·0	13·6	13 44	14·5	7 0	12·0
17	14·4	14·3	13·9	14·3	13·1	13·2	12·7	14·6	14·3	13·7	14·1	14·0	14·0	4 56	14·9	11 42	12·7
18	14·1	14·4	14·3	13·7	13·6	13·6	13·1	14·1	14·3	13·9	14·1	14·0	13·9	16 40	14·5	10 48	12·7
19	14·2	14·5	14·5	13·9	14·0	13·1	11·9	12·9	14·2	13·9	14·0	14·0	13·7	1 4	14·7	11 8	11·4
20	14·2	15·1	14·4	14·1	14·9	13·9	12·7	14·4	15·5	14·3	14·2	14·3	14·4	8 56	16·1	10 48	12·4
21†	14·0	13·8	13·7	13·7	14·8	14·6	11·7	12·0	14·6	14·2	14·0	13·8	13·8	8 52	15·5	12 20	11·1
22†	14·1	14·0	13·8	13·8	15·1	15·4	12·4	13·7	14·7	14·1	14·1	14·0	14·1	8 52	16·5	11 56	12·3
23	13·9	13·9	13·7	13·6	14·9	15·5	11·0	12·3	13·8	13·7	14·0	13·9	13·7	9 4	17·3	11 44	10·9
24	14·2	14·4	14·6	14·3	14·3	14·5	12·5	13·6	14·7	14·8	14·4	15·2	14·4	20 36	16·5	11 48	12·3
25	14·4	13·8	12·1	12·5	13·2	14·4	14·3	13·5	15·0	14·3	14·6	15·8	14·1	21 28	15·8	3 51	12·1
26	14·2	13·9	13·5	12·6	13·5	14·4	13·4	15·4	15·5	14·1	14·5	14·3	14·1	14 24	15·7	6 0	12·5
27	14·0	13·6	13·5	13·3	14·1	15·1	13·3	13·7	14·1	13·8	14·2	14·2	13·9	9 40	15·1	4 28	12·8
28	14·1	13·6	13·4	13·2	13·4	14·7	14·7	15·2	15·0	14·4	14·2	14·0	14·1	14 24	15·4	6 48	12·5
29	14·0	13·9	13·3	13·1	13·7	13·6	12·3	14·0	14·8	14·1	14·1	14·0	13·7	15 32	14·8	11 12	12·0
30	13·7	13·6	13·3	13·4	13·7	14·3	12·8	14·0	15·7	13·7	13·7	13·7	13·8	15 40	15·8	11 36	12·7
31	13·7	14·0	14·1	13·3	13·0	14·2	11·8	13·9	15·3	14·1	15·9	15·1	14·1	19 16	16·1	11 48	11·6
Mean.	14·1	14·0	13·6	13·3	13·4	14·1	13·2	14·0	14·5	14·1	14·2	14·2	13·9				
Mean†	13·9	13·8	13·7	13·4	13·9	14·4	13·0	13·8	14·5	14·1	14·0	13·9	13·9				

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1	14·6	14·3	14·7	14·3	13·2	12·4	11·7	14·0	15·9	14·4	14·2	14·2	14·0	15 50	15·9	11 0	11·3
2	14·2	14·4	14·5	14·3	14·2	13·3	11·6	12·6	15·3	14·3	14·3	13·9	13·8	16 20	15·4	11 40	10·8
3	13·8	13·7	13·6	13·5	13·0	13·2	12·7	14·1	15·1	14·4	13·6	14·5	13·8	16 6	15·2	12 4	12·2
4	14·8	13·5	13·2	13·1	13·4	13·9	14·6	13·7	15·7	14·4	14·1	14·3	14·1	16 12	15·8	5 4	12·8
5	14·4	14·1	13·2	13·6	14·3	14·4	12·8	13·3	14·7	14·1	14·4	13·8	13·9	16 24	14·8	12 24	12·3
6	14·0	13·7	13·3	13·2	12·9	12·2	12·1	13·2	15·0	13·9	14·5	13·8	13·5	19 12	16·1	11 24	11·9
7†	13·6	13·7	13·6	13·3	13·9	13·7	12·5	14·4	14·6	13·7	13·8	13·7	13·7	14 0	14·6	12 0	12·4
8	13·6	13·6	13·4	13·2	13·3	13·6	12·5	13·3	13·8	13·8	14·7	13·8	13·6	20 0	14·8	12 0	12·3
9	14·0	13·9	13·3	13·0	13·0	13·8	13·8	15·1	15·4	15·3	14·1	14·6	14·1	14 18	15·5	6 56	12·6
10	14·1	13·8	14·0	13·3	13·1	12·5	13·1	13·8	14·5	13·3	14·0	14·0	13·7	14 56	14·7	10 0	12·3
11†	14·1	13·8	13·8	13·1	12·9	13·5	13·1	14·8	15·2	13·6	13·8	13·8	13·8	15 28	15·5	7 51	12·9
12	13·6	13·8	13·3	13·3	12·8	12·1	12·6	14·7	15·0	13·8	13·8	13·8	13·5	15 20	15·5	11 0	11·7
13	14·4	15·3	15·3	13·8	13·1	11·9	11·8	14·9	16·7	13·9	13·9	13·7	14·0	16 4	17·1	10 40	11·5
14	13·9	14·5	14·6	14·3	13·5	12·1	12·1	14·8	15·5	13·3	13·5	13·1	13·8	15 4	15·9	11 0	11·7
15	13·3	13·9	14·1	13·6	13·5	11·9	12·7	15·0	15·8	14·7	14·6	14·2	14·0	15 4	17·0	10 38	11·4
16	14·0	14·6	14·2	14·2	14·6	13·0	13·7	16·9	16·9	15·5	15·5	15·3	14·9	14 2	18·0	9 40	12·9
17	14·2	14·4	13·9	13·9	13·5	12·3	12·3	14·3	15·7	15·2	14·3	14·6	14·1	14 20	15·7	10 0	11·9
18	14·7	14·6	15·2	14·5	13·3	12·7	12·4	13·3	14·5	14·1	14·2	14·1	14·1	3 34	15·3	10 40	12·3
19	14·3	14·7	15·0	14·5	14·5	13·3	12·4	13·9	14·5	14·0	14·0	14·1	14·1	2 28	15·1	11 16	11·9
20	14·3	14·3	14·5	13·7	13·4	13·7	13·4	15·0	15·0	14·2	14·2	13·8	14·1	13 44	15·9	10 44	13·3
21	13·7	13·6	13·5	13·6	13·5	13·1	13·3	14·0	15·3	14·3	14·1	13·9	13·8	16 4	15·4	4 58	12·9
22	14·0	13·8	13·7	13·5	13·2	11·7	11·4	14·0	14·7	13·8	14·1	13·9	13·5	15 44	14·8	11 0	11·2
23†	14·0	13·8	13·6	13·7	14·1	13·0	12·3	13·6	14·6	14·0	13·8	13·8	13·7	16 20	14·8	11 38	12·3
24†	13·8	13·6	13·5	13·7	13·6	12·8	12·8	13·6	14·8	14·6	14·1	13·9	13·7	16 56	15·0	11 8	12·5
25†	13·8	13·8	13·8	13·8	13·8	12·8	11·8	13·5	14·9	14·0	13·7	13·7	13·6	15 40	14·9	12 0	11·7
26	13·7	13·7	13·6	13·6	14·4	13·6	12·7	13·3	15·1	13·5	13·4	13·9	13·8	16 0	15·2	12 28	12·5
27	14·6	14·9	14·2	14·0	13·6	13·1	11·7	12·7	15·1	14·1	14·0	14·3	13·8	15 24	15·1	12 8	11·5
28	14·3	14·2	14·0	13·7	14·6	14·1	11·8	13·3	14·3	14·5	13·5	13·6	13·8	8 20	14·9	11 24	11·7
Mean.	14·1	14·1	13·9	13·7	13·6	13·0	12·5	14·0	15·1	14·2	14·1	14·0	13·9				
Mean†	13·8	13·7	13·7	13·5	13·7	13·1	12·5	14·0	14·8	14·0	13·8	13·8	13·7				

*The daily mean ordinates derived from 24 hourly tabulations of the declination magnetograms and corrected for progressive change by 1/48 of the difference between the initial and the terminal hour (0 h to 0 h) are next converted into angle by the factor 10′·28 which is equal to 1 cm. of ordinate on photographic paper; and finally these converted ordinates added to the adopted base-line values give the absolute values of the daily means of declination.

† Five international quiet days.

MARCH. 0° PLUS TABULAR QUANTITIES.

Date.	Hours.												Mean*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1	13·7	13·9	13·6	12·9	13·5	14·1	13·3	14·6	14·9	14·1	14·9	14·3	14·1	19 4	15·8	5 34	12·6
2	14·0	14·0	13·9	13·7	14·2	13·2	13·1	13·7	15·7	14·5	13·6	13·7	13·9	16 2	15·8	12 36	12·5
3	13·6	14·0	14·1	14·0	14·8	14·1	12·7	13·1	14·5	14·1	13·8	13·6	13·9	8 4	15·1	13 0	12·0
4	14·4	14·1	13·7	13·8	15·1	14·4	13·1	13·7	14·1	14·5	13·9	13·7	14·0	8 10	15·9	11 8	12·8
5	13·7	13·9	13·6	13·7	14·3	14·3	12·5	14·4	15·3	14·4	14·7	15·1	14·2	23 28	15·8	12 24	12·2
6	15·3	14·3	14·4	14·1	15·4	14·1	13·2	13·8	14·7	13·9	13·7	13·9	14·2	7 36	15·6	11 40	13·0
7†	13·7	13·7	14·0	14·3	15·7	14·2	12·7	13·5	14·9	14·1	13·7	13·5	14·0	7 40	15·7	12 0	12·3
8†	13·6	13·6	13·7	14·0	15·2	15·7	13·1	12·6	13·6	14·0	14·2	13·8	13·9	9 36	16·1	13 0	12·3
9†	13·7	13·7	13·8	13·8	14·9	15·5	13·5	13·3	14·8	13·8	13·7	13·9	14·0	9 38	15·5	13 0	12·6
10	13·9	13·8	13·7	13·6	14·1	13·9	13·7	13·0	14·7	13·6	13·9	14·3	13·8	10 18	15·6	12 40	12·1
11	14·3	14·3	13·8	14·1	14·3	14·3	14·1	13·4	13·7	13·9	13·6	13·6	13·9	8 20	14·6	14 0	12·8
12	13·9	13·7	13·7	14·1	15·2	15·1	12·0	12·6	14·9	13·9	13·5	15·0	14·0	8 40	15·7	12 12	11·5
13	14·0	13·7	12·9	14·0	15·1	15·8	13·9	12·9	13·8	14·0	13·6	13·9	14·1	10 20	16·2	13 12	11·9
14	14·3	14·4	13·5	13·8	14·9	14·9	13·7	12·4	14·5	14·2	14·2	14·9	14·1	20 2	15·6	13 24	11·7
15	14·9	14·4	14·3	14·5	15·0	14·7	13·7	12·6	14·9	14·0	13·8	13·8	14·2	2 44	15·7	13 28	12·5
16	13·9	13·8	13·5	13·5	14·0	15·0	13·9	12·8	14·1	13·8	13·6	13·7	13·8	10 22	15·1	12 40	12·5
17	13·9	13·8	13·5	13·4	14·2	14·2	13·1	12·9	14·5	14·9	13·8	14·3	13·9	17 40	15·1	12 56	12·5
18	14·2	13·9	13·7	12·7	14·9	14·6	13·5	13·5	14·8	13·9	13·4	14·5	13·9	8 8	15·2	12 56	12·7
19	14·1	13·3	13·7	13·9	15·1	14·3	13·9	13·4	14·1	13·5	13·3	13·3	13·8	8 0	15·2	19 40	12·9
20	13·9	13·9	13·8	14·0	15·5	14·9	14·4	13·5	14·4	13·5	13·4	14·1	14·1	8 12	15·6	13 20	12·6
21	14·1	14·2	14·3	14·0	14·8	13·9	12·8	11·7	14·1	13·7	13·6	13·7	13·7	8 0	14·9	13 44	11·5
22	14·0	13·7	13·5	13·4	14·9	15·7	13·9	12·5	14·0	13·3	13·4	13·7	13·9	9 24	15·9	13 52	12·4
23†	13·7	13·5	13·6	12·9	14·1	15·1	12·9	12·2	13·7	13·3	13·4	13·5	13·6	9 48	15·2	13 0	12·0
24†	13·9	13·8	13·5	13·0	14·9	15·3	13·4	11·9	14·0	13·4	13·3	13·5	13·7	9 20	15·6	13 40	11·5
25	13·7	13·9	13·3	13·2	15·5	14·5	14·3	12·6	14·2	12·7	13·2	13·7	13·7	8 24	15·7	13 12	12·5
26	14·1	14·0	13·9	13·7	14·5	14·5	12·7	12·7	14·1	13·4	13·4	14·1	13·7	8 8	14·8	12 40	11·6
27	14·0	13·5	13·8	14·1	14·7	14·6	12·1	11·7	13·6	13·4	13·4	13·6	13·5	7 48	14·8	13 0	11·5
28	13·9	13·8	13·5	13·5	14·3	14·7	12·9	12·1	13·5	13·3	12·9	13·3	13·5	8 52	14·8	13 20	11·5
29	13·7	14·0	13·4	12·9	15·3	15·5	12·7	12·0	13·0	12·9	13·9	13·9	13·7	9 4	15·8	12 28	11·5
30	13·9	13·7	13·3	12·8	15·4	15·6	13·0	11·9	14·7	14·7	14 5	14·5	14·0	9 44	15·7	13 8	11·5
31	14·0	13·8	13·1	13·5	15·8	15·3	12·7	12·1	13·8	14·1	13·5	13·8	13·8	8 0	15·8	12 36	11·5
Mean.	14·0	13·9	13·7	13·7	14·8	14·7	13·2	12·9	14·3	13·8	13·7	13·9	13·9				
Mean†	13·7	13·7	13·7	13·6	15·0	15·1	13·1	13·7	14·2	13·7	13·7	13·7	13·8				

APRIL. 0° PLUS TABULAR QUANTITIES.

1	14·1	13·6	14·0	13·8	14·8	14·0	12·3	12·6	13·1	13·4	13·5	13·5	13·6	8 16	15·3	12 56	12·0
2	13·4	13·8	13·7	13·7	14·5	14·5	12·4	11·7	13·1	14·0	13·4	13·5	13·5	9 28	14·7	12 44	11·5
3	14·0	13·7	13·7	13·6	15·3	14·7	11·6	11·5	13·5	14·1	13·5	13·8	13·5	8 24	15·4	13 0	10·5
4†	13·5	13·5	13·5	13·3	15·3	15·1	13·1	12·4	13·5	13·8	13·3	13·4	13·6	7 32	15·3	13 12	12·0
5†	13·4	13·4	13·4	13·4	16·7	15·7	12·2	12·2	13·3	13·6	13·1	13·3	13·6	8 20	16·8	12 32	11·6
6†	13·4	13·3	13·4	13·7	14·9	14·5	12·6	12·8	14·4	14·0	13·4	13·3	13·6	8 44	15·1	12 20	12·0
7†	13·3	13·4	13·4	13·9	15·8	14·5	12·1	12·2	13·4	13·4	13·1	13·1	13·5	8 0	15·9	12 40	11·5
8	13·4	13·5	13·6	13·9	15·6	15·4	12·9	12·5	13·9	13·3	13·1	13·9	13·8	8 56	16·0	13 0	12·5
9	13·9	13·9	13·9	14·1	15·5	14·8	12·0	11·3	12·8	13·3	14·0	14·1	13·7	8 32	16·3	13 28	11·0
10	13·6	13·7	13·8	13·5	15·1	13·6	11·2	12·5	15·1	14·0	13·3	14·1	13·6	8 8	15·3	12 40	10·7
11	13·9	14·3	14·0	14·8	16·0	14·2	10·9	11·7	13·5	13·5	13·2	13·7	13·6	7 52	16·1	12 8	10·4
12	14·0	13·8	14·6	13·7	16·9	15·5	11·7	11·3	13·0	13·8	12·9	14·0	13·8	8 24	17·0	12 48	10·8
13	14·0	14·6	14·5	14·1	16·5	15·8	12·4	11·6	13·3	13·5	13·2	13·8	13·9	9 12	16·6	13 32	11·5
14	14·0	14·4	14·4	14·6	15·5	14·7	12·3	11·2	13·1	13·3	13·2	13·4	13·7	8 20	15·9	12 52	10·9
15	13·9	14·2	14·0	13·5	14·8	14·4	12·4	10·4	11·8	13·2	13·3	13·7	13·3	8 30	15·3	13 34	10·4
16	13·9	13·5	14·1	13·3	14·6	14·4	11·7	12·0	13·3	13·4	13·3	13·3	13·4	9 8	15·1	12 28	10·9
17	13·7	14·1	14·2	13·3	15·5	15·1	13·4	11·5	13·3	13·6	13·3	13·5	13·7	8 54	15·8	13 20	11·5
18	13·9	14·2	13·9	13·9	15·3	13·8	11·7	11·5	13·3	13·3	13·1	13·4	13·4	7 32	15·3	12 40	10·8
19†	14·0	14·3	13·9	13·9	14·5	13·8	12·1	12·3	13·2	13·4	13·2	13·5	13·5	7 0	14·7	12 22	11·8
20	13·9	14·1	13·8	13·8	14·5	13·5	11·2	11·5	12·6	12·5	12·6	13·0	13·1	8 0	14·6	13 0	10·8
21	13·5	14·4	13·7	13·4	15·0	14·4	12·2	11·9	13·1	13·0	12·9	14·0	13·5	8 12	15·1	13 10	11·4
22	15·0	15·5	15·8	14·2	15·4	14·0	12·8	12·3	13·9	12·8	12·9	13·6	14·0	5 0	16·2	13 8	11·8
23	13·5	13·7	13·7	13·9	14·7	14·5	11·2	11·9	13·3	13·2	12·5	13·5	13·4	9 24	15·0	12 4	10·7
24	14·0	13·3	13·3	14·2	15·8	14·0	11·9	11·7	13·8	13·3	13·5	13·7	13·5	7 16	16·1	13 4	10·7
25	13·5	14·0	12·9	14·7	16·1	14·0	11·0	11·4	13·3	12·8	13·4	13·5	13·4	7 44	16·2	12 40	10·5
26	13·7	14·1	13·2	14·3	15·7	14·1	11·9	13·3	13·3	12·9	13·5	13·0	13·6	7 2	15·8	11 52	11·6
27	13·7	13·9	12·9	14·0	15·0	12·9	11·8	12·1	13·7	13·6	13·0	13·8	13·4	7 0	15·2	11 36	11·5
28	13·6	13·4	13·8	13·9	15·7	13·1	11·5	12·3	12·8	13·4	13·3	13·1	13·3	7 32	15·8	12 20	11·3
29	13·6	13·4	13·5	13·8	16·1	12·9	11·1	12·4	13·4	13·6	13·0	13·1	13·3	7 44	16·2	12 34	10·9
30	13·5	13·5	13·3	14·0	15·3	13·0	10·3	11·5	13·6	14·4	13·1	13·3	13·2	7 32	15·4	11 50	10·2
Mean.	13·8	13·9	13·8	13·9	15·4	14·3	11·9	11·9	13·4	13·5	13·2	13·5	13·5				
Mean†	13·5	13·6	13·5	13·6	15·4	14·7	12·4	12·4	13·5	13·6	13·2	13·3	13·6				

* See foot-note on page 48

† Five international quiet days.

MAY. 0° PLUS TABULAR QUANTITIES.

Date.	Hours.												Mean*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1	13·3	13·6	13·9	14·5	14·9	12·7	10·6	12·0	13·7	13·7	13·2	13·0	13·3	7 0	15·2	11 56	10·3
2†	13·3	13·6	13·6	14·5	15·3	12·7	10·3	11·1	12·5	12·9	12·9	13·2	13·0	6 40	15·4	12 0	10·0
3†	13·2	13·4	13·3	13·5	15·3	13·9	11·0	11·7	13·0	13·2	12·9	13·1	13·1	7 44	15·3	12 20	10·7
4	13·1	13·2	13·3	13·9	15·1	13·7	12·4	11·7	12·9	13·6	13·1	12·9	13·2	7 40	15·2	12 42	11·6
5	13·1	13·3	13·4	13·6	14·4	13·0	11·0	11·7	12·8	13·1	12·8	12·9	13·0	7 14	14·5	12 58	10·2
6	13·5	13·7	13·5	13·9	15·5	13·2	11·4	12·9	13·4	13·5	12·8	13·0	13·4	7 44	15·5	12 20	11·3
7	13·5	13·6	13·9	15·0	14·4	12·5	11·8	12·6	13·6	13·3	13·1	13·1	13·4	6 0	15·1	12 44	11·1
8	14·0	14·8	15·2	15·7	14·9	12·0	10·7	11·5	12·3	13·4	12·9	13·3	13·5	3 14	16·1	12 18	10·2
9	14·1	13·9	13·8	14·9	15·6	12·3	10·8	12·1	13·4	13·4	13·4	13·4	13·5	6 44	15·7	12 8	10·6
10	13·8	14·0	14·1	15·6	15·6	14·2	11·7	12·0	13·7	13·0	13·0	13·1	13·6	6 58	16·2	12 28	11·4
11	13·2	14·0	13·4	14·6	15·7	13·4	11·5	11·1	12·3	13·4	12·9	13·0	13·1	7 4	15·8	12 4	10·5
12	13·7	13·9	13·7	14·3	15·8	13·5	11·4	11·3	12·7	13·0	12·6	13·0	13·2	7 50	15·8	12 26	10·7
13	13·6	13·9	13·9	14·3	16·0	14·3	11·5	11·2	12·8	13·4	12·6	13·3	13·4	7 36	16·0	12 56	10·7
14	13·5	13·7	13·4	13·3	14·5	13·8	12·2	11·4	12·9	13·3	13·1	13·3	13·2	8 34	14·6	12 44	11·1
15†	13·7	13·6	13·4	13·3	15·3	14·7	12·2	11·5	12·3	13·0	13·0	13·3	13·3	8 16	15·5	13 44	11·2
16	13·5	13·6	13·5	13·5	15·8	13·1	11·4	10·7	12·4	12·7	12·6	14·0	13·1	7 38	15·8	13 32	10·2
17	14·5	14·7	14·8	14·2	15·3	13·6	11·2	10·6	12·0	12·7	12·9	13·1	13·2	8 4	15·5	13 28	10·3
18	13·7	13·5	13·6	14·4	15·3	13·7	13·0	12·4	12·7	12·5	12·9	13·3	13·4	7 20	15·3	13 56	12·2
19	13·3	13·5	14·0	14·1	15·5	13·9	11·5	12·1	13·0	12·9	12·8	13·5	13·3	7 10	15·5	11 44	11·2
20	13·5	13·8	13·4	13·8	14·5	13·0	11·3	11·1	12·4	12·8	12·7	13·1	12·9	7 36	14·5	13 0	10·5
21	13·2	13·9	13 5	14·9	16·8	12·3	11·4	11·7	12·3	12·6	13·3	13·2	13·2	7 32	16·8	14 40	11·3
22	13·6	13·4	13·3	13·8	14·7	12·8	11·3	11·8	12·7	12·7	12·8	13·0	13·0	7 48	14·7	12 24	10·6
23	13·4	13·9	13·4	14·0	15·0	13·0	11·1	11·9	13·1	12·5	12·4	12·7	13·0	7 56	15·1	12 20	10·3
24	13·3	13·4	13·1	13·7	14·8	13·0	11·9	12·2	12·6	13·9	12·9	12·8	13·1	7 20	14·9	13 4	11·4
25	13·0	13·1	13·2	14·3	15·3	11·9	10·8	11·6	13·7	13·1	13·2	12·9	13·1	6 58	15·3	11 34	10·7
26	13·3	13·2	13·3	14·5	14·9	12·4	10·8	11·9	13·3	13·2	13·5	13·1	13·1	7 0	15·4	12 32	10·5
27	12·9	12·9	13·3	15·1	15·7	13·8	11·5	11·8	13·4	13·7	12·8	12·5	13·3	7 12	15·9	12 24	11·2
28	12·9	13·2	13·6	14·8	15·4	12·3	9·5	10·9	12·7	13·5	12·8	12·9	12·9	7 30	15·8	12 0	9·4
29	13·3	13·4	13·4	15·1	15·5	13·5	11·0	11·2	13·1	13·5	12·5	12·5	13·1	7 0	15·6	12 28	10·1
30	13·1	13·1	13·0	14·3	15·3	12·9	10·7	11·0	12·2	12·8	12·5	12·7	12·8	6 40	15·3	12 4	10·5
31	12·9	13·0	12·9	14·5	16·0	13·0	10·5	10·4	12·2	12·5	12·0	12·3	12·7	7 36	16·0	13 40	9·3
Mean.	31·4	13·6	13·6	14·3	15·3	13·2	11·3	11·6	12·8	13·1	12·9	13·0	13·2				
Mean†	13·3	13·3	13·2	14·0	15·4	13·5	10·9	11·1	12·4	12·9	12·7	12·9	13·0				

JUNE. 0° PLUS TABULAR QUANTITIES.

1	12·7	13·2	13·3	14·3	15·1	13·3	10·5	10·4	12·7	12·8	12·4	12·5	12·7	7 20	15·3	12 40	9·6
2	13·0	13·5	13·5	14·3	15·0	13·0	11·2	10·5	11·9	12·9	12·4	13·0	12·9	6 44	15·2	13 44	10·3
3	13·8	14·7	13·4	14·7	15·5	13·0	10·4	11·0	11·9	12·5	12·7	13·0	13·1	7 28	15·6	12 36	9·9
4	13·4	14·4	13·9	14·9	15·9	13·9	11·6	11·1	12·3	12·3	12·7	12·6	13·2	7 20	15·9	12 24	11·0
5	13·7	13·5	13·5	14·4	14·8	12·4	10·9	11·8	12·8	12·4	12·2	12·9	12·9	7 24	14·9	11 40	10·9
6	13·2	13·8	13·7	14·3	14·7	12·9	11·6	11·5	12·2	12·3	12·5	13·0	12·9	7 22	14·8	12 20	11·2
7	13·1	13·1	13·9	14·4	14·3	13·7	11·5	10·9	12·2	12·7	12·3	12·9	12·9	7 44	15·2	12 56	10·3
8	13·1	13·4	13·8	14·5	14·7	13·1	10·9	11·0	12·0	12·8	12·5	12·7	12·9	7 34	14·9	12 44	10·7
9	13·1	13·5	13·6	14·3	15·0	13·5	11·7	11·1	11·9	12·5	12·6	12·5	12·9	7 22	15·1	12 38	10·8
10†	13·1	13·6	13·5	14·2	15·2	13·3	10·8	10·9	12·5	12·8	12·5	13·0	12·9	8 0	15·3	12 40	10·2
11†	13·1	13·4	13·5	14·2	14·8	12·5	9·5	10·0	11·9	12·7	12·6	12·9	12·6	7 8	15·0	12 4	8·9
12	13·1	13·5	13·2	14·2	15·2	13·8	11·4	11·0	12·0	12·6	12·2	12·9	13·0	7 4	15·4	12 40	10·7
13	13·5	13·9	14·0	14·4	14·9	12·8	11·0	10·3	11·3	12·9	12·6	12·6	12·8	6 58	15·2	14 0	10·2
14	13·3	13·8	13·4	13·5	15·2	12·7	9·9	10·5	12·0	12·9	12·7	13·0	12·8	7 16	15·2	12 36	9·2
15	13 3	13·3	13·0	13·9	15·1	13·3	10·8	9·8	12·3	12·8	12·6	12·8	12·8	7 16	15·2	12 40	9·6
16	13·0	13·0	13·2	13·7	14·7	11·9	10·7	10·6	11·2	11·9	11·8	11·8	12·3	7 20	14·8	12 40	10·3
17	12·2	13·5	13·0	13·5	14·2	13·0	11·2	11·7	12·7	12·7	12·5	13·1	12·9	6 54	14·7	11 48	11·0
18	13·0	13·2	13·7	14·4	14·0	12·6	9·6	10·0	11·7	13·4	12·7	13·0	12·6	7 36	15·1	12 18	9·0
19	13·2	13·3	13·3	14·9	15·8	12·6	10·5	11·4	12·5	12·5	12·3	12·8	12·9	7 12	15·8	12 0	10·4
20	13·1	13·3	13·0	13·9	15·2	13·4	10·8	11·5	12·2	12·9	12·5	12·4	12·8	7 40	15·2	12 4	10·5
21	13·0	13·3	13·5	13·7	14·8	14·3	12·5	11·5	12·4	12·8	12·5	12·5	13·1	9 4	15·2	13 52	11·3
22	13·0	13·1	13·0	14·6	15·1	13·0	10·3	10·7	13·2	13·0	12·5	13·2	12·9	7 40	15·3	12 48	9·6
23	13·3	13·5	13·2	14·6	16·1	14·6	11·3	10·2	12·0	12·7	12·9	12·8	13·1	7 44	16·1	12 32	9·9
24†	13·3	13·2	13·3	14·2	14·4	12·6	10·9	11·0	12·1	13·3	12·5	12·7	12·8	6 24	14·6	12 16	10·3
25†	13·1	13·0	13·1	14·5	15·7	13·5	10·8	10·5	12·5	13·0	12·3	12·2	12·8	7 40	15·7	12 50	9·9
26	12·8	13·1	13·3	14·4	15·9	14·2	11·2	10·6	11·7	12·8	12·5	12·5	12·9	8 4	16·0	13 52	10·6
27	12·9	12·9	13·4	14·6	15·6	12·5	10·9	10·9	12·4	12·9	12·5	12·5	12·8	7 40	15·6	12 44	9·9
28	12·4	12·9	13·1	14·3	15·1	12·1	10·4	10·4	11·9	12·2	12·4	12·6	12·6	7 4	15·3	11 56	10·3
29	13·4	13·8	14·3	16·5	14·8	12·5	9·4	10·0	11·0	12·1	12·1	12·5	12·7	6 18	16·7	13 12	8·9
30	13·3	14·4	14·1	14·8	17·3	14·5	11·4	9·9	11·3	12·5	12·7	13·0	13·3	8 0	17·5	13 58	9·8
Mean.	13·1	13·5	13·5	14·4	15·1	13·2	10·9	10·7	12·1	12·7	12·5	12·7	12·9				
Mean†	13·2	13·3	13·3	14·2	15·0	13·1	10·5	10·4	12·2	12·9	12·5	12·7	12·8				

* See foot-note on page 48.

† Five international quiet days.

JULY. 0° PLUS TABULAR QUANTITIES.

Date.	Hours.												Mean*.	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1	13·6	14·0	14·0	15·0	15·9	13·5	11·7	11·1	11·7	12·6	13·0	13·2	13·3	7 36	15·9	15 0	10·7
2	13·5	13·5	13·7	14·9	15·8	13·0	11·1	10·0	12·3	12·6	12·4	12·8	13·1	8 20	15·9	13 38	9·7
3	13·5	13·9	13·8	14·8	15·9	13·1	10·9	10·6	12·3	13·1	12·1	12·7	13·0	7 0	16·2	12 56	9·7
4	13·3	13·6	14·1	15·1	15·9	13·4	10·8	11·7	13·0	13·4	12·8	12·8	13·3	7 22	16·2	12 20	10·5
5	13·0	13·1	13·3	14·9	15·1	13·0	10·4	11·4	12·2	12·7	12·3	12·7	12·8	7 22	15·7	12 4	10·2
6	13·1	13·6	13·7	14·5	14·7	12·9	11·1	13·2	13·7	12·1	12·5	12·5	13·1	7 34	14·8	10 58	10·6
7	12·5	13·3	13·6	14·8	13·2	11·4	10·1	11·0	12·3	12·6	12·2	12·5	12·5	6 48	14·9	11 56	10·0
8†	12·7	13·1	13·1	13·9	14·7	11·8	9·5	9·9	11·6	12·3	12·0	12·1	12·2	6 52	15·1	11 30	9·4
9	12·7	13·4	13·3	13·5	14·9	13·7	10·7	9·9	11·9	12·9	11·8	12·3	12·6	7 12	14·9	13 22	9·5
10	12·5	13·0	13·2	13·8	15·4	12·7	9·4	9·7	11·1	12·1	11·6	12·3	12·2	7 38	15·4	12 32	8·7
11†	13·0	13·6	13·5	14·0	14·9	14·2	11·6	11·6	11·5	12·9	12·2	12·5	13·0	8 48	15·1	12 40	10·8
12†	13·1	13·3	13·2	14·5	16·0	13·4	10 0	9·7	11·6	12·3	12·1	12·3	12·6	7 20	16·0	13 4	9·5
13	12·7	12·9	12·8	13·1	15·1	15·2	12·4	11·2	11·1	12·2	12·0	12·3	12·8	8 24	15·5	14 56	10·5
14	12·6	13·1	12·9	14·3	15·9	13·4	11·1	12·0	11·3	11·0	11·6	12·4	12·7	7 44	15·9	17 32	10·8
15	12·8	12·9	12·6	13·0	14·7	14·8	12·3	10·3	12·1	12·7	12·4	12·4	12·7	9 4	14·9	13 24	9·9
16	12·6	12·9	12·8	13·7	14·8	13·3	11·0	11·5	13·4	12·6	12·9	12·8	12·9	7 32	14·8	12 58	10·6
17	12·4	13·0	12·8	13·5	14·7	13·2	10·1	11·5	12·7	12·9	12·5	12·4	12·7	6 48	15·2	12 12	9·9
18	12·7	12·7	12·7	13·5	14·3	12·7	10·9	9·9	11·4	12·3	12·8	12·5	12·3	6 56	14·3	14 10	9·5
19	12·4	12·8	12·8	13·2	14·6	13·1	10·9	11·6	12·6	12·5	12·4	12·4	12·7	7 32	14·6	12 58	10·3
20	12·7	13·2	13·3	14·0	14·3	12·6	11·0	11·3	13·1	11·4	12·4	12·4	12·7	6 48	14·5	12 4	10·7
21†	12·8	13·0	13·4	14·1	14·3	13·3	12·1	11·7	12·0	12·8	12·6	12·3	12·8	6 52	14·5	12 40	11·2
22†	12·7	12·9	12·8	13·8	14·6	12·2	10·5	11·4	12·3	12·3	12·3	12·3	12·5	6 48	14·8	11 8	10·5
23	12·5	12·6	12·9	14·1	14·5	12·6	11·0	11·1	13·5	13·0	12·0	11·7	12·6	6 44	14·7	13 4	10·8
24	12·1	12·3	13·5	13·7	14·3	12·3	11·7	11·7	12·5	12·7	12·2	12·6	12·6	7 24	14·3	12 28	11·4
25	12·8	13·6	13·8	14·3	14·3	12·3	10·1	10·9	12·6	13·1	12·1	12·4	12·6	6 42	14·5	11 16	10·0
26	12·7	12·9	13·3	13·9	14·4	10·8	9·0	10·7	12·4	12·9	12·4	13·4	12·6	6 26	15·4	11 44	8·8
27	13·8	13·9	14·6	15·1	14·2	13·2	10·9	11·6	13·3	12·0	12·5	11·9	13·0	6 48	15·3	12 16	10·7
28	12·4	13·5	13·7	15·0	15·7	14·0	11·5	10·6	12·6	13·1	12·2	12·2	13·0	7 12	16·4	12 56	10·2
29	13·0	13·4	13·5	14·3	14·4	12·2	11·2	10·9	12·3	12·6	12·0	12·3	13·7	6 16	14·6	12 52	10·5
30	13·1	13·1	13·2	14·7	14·9	12·0	10·5	10·9	12·5	13·1	11·8	12·0	12·6	6 56	15·3	11 44	10·3
31	12·4	12·8	13·1	14·2	14·5	12·9	11·2	11·1	12·1	12·4	11·8	12·1	12·5	6 12	14·7	13 44	11·1
Mean.	12·8	13·2	13·3	14·2	14·9	13·0	10·9	11·0	12·3	12·6	12·3	12·4	12·8				
Mean†	12·9	13·2	13·2	14·1	14·9	13·0	10·8	10·7	11·8	12·5	12·2	12·3	12·6				

AUGUST. 0° PLUS TABULAR QUANTITIES.

1	12·5	12·7	13·1	13·9	13·5	11·5	10·5	11·8	12·4	12·3	12·2	12·3	12·4	6 8	14·3	12 8	10·4
2†	12·6	13·1	13·4	14·6	14·5	12·8	12·0	12·1	13·1	12·6	11·8	12·1	12·9	6 32	14·9	12 28	11·5
3†	12·7	13·0	12·9	13·2	12·8	12·1	11·3	11·9	12·6	12·0	12·0	12·5	12·4	6 28	13·3	11 42	11·1
4	12·6	12·9	12·8	13·6	13·8	12·0	11·6	12·0	13·0	12·4	11·6	11·9	12·5	6 26	14·0	12 48	10·9
5	12·2	12·8	13·0	13·6	12·9	11·1	9·6	11·0	12·6	12·9	11·5	11·9	12·1	6 40	14·2	11 56	9·5
6	12·1	12·8	13·1	14·2	14·0	11·1	11·2	11·1	12·3	12·5	11·8	12·3	12·4	6 56	14·7	12 48	10·8
7	12·7	12·9	13·1	14·1	13·5	12·0	9·5	9·6	12·0	12·2	12·1	12·0	12·2	6 24	14·7	12 12	9·3
8	12·5	12·6	12·6	13·9	14·3	10·8	8·5	9·7	12·6	12·7	11·7	11·9	12·0	6 56	14·6	11 24	8·5
9	12·3	12·7	12·4	14·1	13·8	10·5	9·2	10·1	12·2	12·3	11·2	11·1	11·8	6 44	14·7	11 20	8·9
10	12·2	12·7	13·1	13·1	14·0	11·7	10·9	11·2	13·3	13·2	12·4	11·9	12·5	7 24	14·2	13 4	10·7
11	12·0	12·5	12·5	13·8	13·7	12·2	10·1	11·9	13·3	12·7	12·8	13·2	12·6	6 20	14·3	12 4	9·9
12	12·7	12·6	13·1	14·7	14·9	11·7	9·9	10·8	12·3	12·6	12·3	12·4	12·4	6 36	15·4	11 52	9·8
13	12·2	12·2	12·9	14·4	13·9	12·1	10·1	11·4	12·6	11·6	12·2	11·8	12·3	6 24	14·9	11 56	9·9
14	12·3	12·3	12·1	13·8	14·7	12·4	11·5	11·0	13·4	13·5	12·2	11·9	12·6	6 54	15·0	13 22	10·8
15	12·3	12·5	12·6	14·0	14·2	12·1	10·1	10·6	12·0	12·9	12·7	11·9	12·3	6 40	14·8	12 16	10·0
16	12·3	12·4	12·6	13·9	15·3	13·2	11·7	11·3	12·1	12·4	12·1	12·0	12·6	7 20	15·3	12 44	10·9
17†	12·1	12·3	12·5	13·3	13·3	11·6	9·2	10·6	13·2	13·2	12·1	11·9	12·1	16 24	13·9	11 56	9·1
18†	12·1	12·1	12·6	13·5	14·5	11·4	9·8	10·6	12·5	12·6	11·7	11·6	12·1	7 28	14·5	12 4	9·6
19	11·7	12·0	12·1	13·6	14·6	10·7	8·4	10·1	12·9	12·5	11·6	11·8	11·9	6 56	14·8	11 50	8·3
20	12·1	11·9	12·2	13·1	13·5	10·8	9·3	10·5	12·9	13·0	12·1	11·7	11·9	6 50	13·7	11 40	9·3
21	11·9	12·4	12·5	13·9	15·2	11·8	8·6	9·3	11·5	12·2	11·9	12·5	12·0	7 30	15·6	12 20	8·2
22	12·7	12·4	12·4	13·3	14·0	12·2	10·0	9·5	11·6	11·9	12·2	11·7	12·0	7 28	14·4	13 36	9·4
23	12·0	12·4	12·6	13·5	14·6	11·9	7·5	8·5	11·8	11·8	12·1	12·0	11·7	7 20	14·7	12 12	7·2
24	12·3	13·1	12·7	13·7	14·3	11·5	10·0	10·1	12·1	12·3	11·4	11·5	12·1	7 12	14·6	12 12	9·2
25	12·3	12·5	12·3	13·3	15·2	11·5	8·5	9·2	11·9	12·2	11·5	11·5	11·8	7 12	15·4	12 22	8·4
26	11·8	12·1	12·4	13·4	15·3	11·1	8·3	10·2	12·2	12·7	11·9	12·0	12·0	7 24	15·5	11 24	8·3
27	12·1	12·5	13·0	13·0	14·6	11·2	8·6	8·6	10·1	12·3	11·7	11·8	11·6	8 4	14·7	12 20	8·4
28†	12·0	12·3	12·2	13·7	15·3	12·2	9·1	9·4	11·7	12·0	11·9	11·5	11·9	7 32	15·5	12 32	8·8
29	11·9	11·8	12·1	13·4	14·2	10·7	7·6	9·2	11·3	11·9	12·2	12·1	11·6	7 4	14·7	11 30	7·5
30	12·2	12·0	11·6	13·1	14·9	13·0	9·2	9·5	12·0	12·1	11·7	11·7	11·9	7 44	14·9	12 24	9·0
31	12·4	11·8	12·1	13·3	15·4	9·9	6·7	8·0	12·1	12·6	11·7	12·0	11·5	7 48	15·4	11 52	6·6
Mean.	12·3	12·5	12·6	13·7	14·3	11·6	9·6	10·3	12·3	12·5	11·9	11·9	12·1				
Mean†	12·3	12·5	12·7	13·7	14·1	12·0	10·3	10·9	12·6	12·5	11·9	11·9	12·3				

* See foot-note on page 48.

† Five international quiet days.

SEPTEMBER. °0 PLUS TABULAR QUANTITIES.

Date.	Hours.												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1	12·0	12·5	12·5	14·1	14·1	11·6	9·5	10·7	12·8	12·0	11·7	11·7	12·1	7 4	14·7	H 44	9·5
2†	11·9	12·2	12·4	13·0	13·2	9·9	7·3	9·6	12·8	12·2	11·2	11·7	11·4	7 24	14·3	11 51	7·3
3	11·9	12·1	12·5	13·8	13·7	10·3	8·0	9·5	11·7	11·6	11·4	11·6	11·5	6 44	14·1	11 51	8·0
4	11·6	11·9	12·4	13·4	14·0	11·1	9·1	10·5	11·6	11·4	11·6	11·6	11·5	6 48	14·2	11 20	8·9
5	11·7	12·0	12·2	12·7	13·7	10·2	7·2	9·5	11·5	11·9	11·4	11·7	11·3	7 16	13·7	11 44	7·1
6	11·8	12·1	12·1	12·5	14·2	11·7	8·6	9·1	12·2	12·5	12·0	12·1	11·8	7 32	14·4	12 16	8·4
7	11·6	11·4	11·4	12·4	14·3	11·8	8·2	10·2	12·0	12·1	12·2	12·6	11·7	7 6	14·5	12 20	8·1
8	12·4	11·9	11·7	13·1	14·1	11·0	8·3	9·3	12·5	12·7	12·7	11·7	11·8	7 20	14·5	12 4	8·1
9	11·8	11·8	12·1	12·6	13·1	10·9	8·9	9·9	12·1	12·9	11·6	11·7	11·6	7 0	14·5	11 48	8·9
10	11·5	11·5	11·7	12·6	13·9	10·7	9·5	9·9	12·0	12·8	12·3	12·3	11·8	7 24	14·2	11 32	9·5
11	12·3	12·0	12·1	13·2	14·5	11·7	9·2	10·4	12·6	11·6	11·3	11·1	11·8	7 16	14·6	11 44	8·7
12	11·6	11·9	11·9	12·7	14·1	11·3	8·4	9·6	11·7	11·7	11·3	11·4	11·5	7 20	14·1	11 44	8·4
13	11·7	11·8	11·8	12·3	14·1	11·9	10·0	10 3	11·9	11·1	11·2	11·7	11·7	7 48	14·2	12 28	9·7
14	11·6	11·6	11·4	11·5	13·4	12·6	11·5	11·3	12·4	13·2	13·9	13·5	12·4	19 54	14·2	4 40	10·8
15	13·3	13·5	13·3	13·7	14·3	12·1	10·3	10·5	12·1	11·9	11·7	12·0	12·3	7 44	14·4	12 32	9·7
16	12·3	11·7	12·7	12·3	14·1	13·0	10·6	10·1	11·6	11·3	11·4	11·5	11·9	7 36	14·3	12 28	9·7
17	11·5	11·9	11·7	12·0	12·9	11·3	10·2	10·6	12·1	11·7	11·7	11·7	11·7	7 36	13·5	11 12	10·0
18	12·4	12·6	12·4	12·3	13·1	11·4	10·1	10·1	11·8	12·0	11·5	11·5	11·7	6 24	13·2	11 40	9·7
19	11·7	12·1	12·5	12·9	14·1	11·6	10·1	10·5	12·5	11·6	11·5	11·7	11·9	7 28	14·3	11 38	9·9
20	11·9	12·1	12·5	12·1	12·9	11·1	9·9	10·0	11·9	11·1	10·9	11·6	11·5	7 20	13·3	12 44	9·6
21	12·2	12·8	12·8	13·3	13·4	11·0	9·8	10·7	12·7	12·3	11·8	11·7	12·0	6 50	14·1	12 34	9·3
22†	11·9	12·4	12·4	12·8	14·1	10·8	8·1	9·8	11·6	11·5	11·3	11·5	11·5	7 28	14·3	11 30	8·1
23†	11·8	12·2	12·0	12·0	13·5	12·0	10·4	10·2	11·5	11·3	11·3	11·6	11·7	7 26	13·6	12 52	9·7
24†	11·9	12·0	11·9	11·6	12·5	11·6	10·4	10·3	11·4	11·5	11·6	11·6	11·5	7 26	12·6	12 24	9·9
25	11·8	11·9	11·7	11·7	13·1	11·9	10·4	10·4	11·6	11·4	11·8	11·7	11·6	7 40	13·1	13 24	9·8
26†	11·7	11·8	11·6	11·7	13·0	10·4	8·4	10·1	11·7	11·9	11·5	11·6	11·3	7 42	13·1	11 40	8·3
27	11·8	11·8	11·7	11·8	13·2	12·7	10·4	10·6	11·3	11·2	11·3	11·7	11·6	8 36	13·4	12 16	10·2
28	11·8	12·3	12·2	11·5	13·0	11·7	10·6	10·1	11·0	11·3	11·3	11·4	11·5	7 40	13·1	12 36	9·4
29	11·5	12·0	11·8	11·8	12·2	10·6	9·3	9·9	11·2	11·2	11·1	11·3	11·2	7 16	12·5	11 44	9·3
30	11·9	12·0	11·4	12·5	13·0	11·1	9·5	10·3	11·3	11·6	11·4	11·6	11·5	7 48	13·1	11 26	9·5
Mean.	11·9	12·1	12·1	12·5	13·6	11·4	9·4	10·1	11·9	11·8	11·6	11·7	11·7				
Mean†	11·9	12·1	12·0	12·2	13·3	10·9	8·9	10·0	11·8	11·7	11·4	11·6	11·5				

OCTOBER. 0° PLUS TABULAR QUANTITIES.

1†	11·7	11·8	11·9	12·0	13·7	11·7	9·2	9·9	12·4	11·8	11·7	11·6	11·6	7 34	13·8	12 40	8·7
2	11·5	11·7	11·6	11·9	12·9	12·2	10·1	10·6	12·1	11·5	11·7	11·6	11·6	7 16	13·0	13 4	9·6
3	11·4	11·8	11·1	11·5	13·2	11·7	10·3	10·9	12·5	12·5	11·6	11·8	11·7	7 28	13·3	13 12	10·2
4	12·2	11·5	11·8	12·2	12·2	10·4	9·3	10·6	12·1	11·8	11·8	11·6	11·5	15 40	13·6	11 44	9·1
5	11·6	11·5	11·4	12·1	13·2	11·3	10·3	11·5	12·8	12·3	14·1	13·2	12·3	16 44	14·6	12 16	9·9
6	12·8	11·7	12·2	12·9	13·2	10·6	9·9	11·2	12·2	12·3	13·3	11·7	11·9	6 44	13·7	11 30	9·9
7	12·0	11·8	11·8	12·1	13·9	12·1	10·6	11·1	13·4	13·2	11·9	12·2	12·2	7 24	14·0	12 16	9·9
8	11·7	11·2	11·3	11·7	13·2	11·5	9·7	10·5	12·5	13·4	11·5	11·5	11·6	17 44	13·6	11 20	9·5
9	11·8	11·2	11·9	11·5	12·7	11·6	10·1	11·1	12·0	11·4	11·3	11·7	11·5	7 36	12·7	12 28	9·8
10	11·8	11·3	11·9	11·4	12·5	11·4	10·9	10·4	11·5	11·4	11·3	11·8	12·5	8 12	12·6	13 24	10·3
11	11·8	11·3	11·8	11·1	12·8	11·6	10·5	10·1	11·5	11·6	11·5	11·5	11·4	8 12	12·9	12 22	9·7
12	11·4	11·3	11·5	10·8	12·7	11·7	11·0	11·8	13·2	12·5	11·9	11·9	11·9	16 56	13·3	4 44	10·8
13	11·9	11·7	11·6	11·1	12·7	12·1	9·8	10·4	12·2	12·0	11·6	11·6	11·6	8 46	12·9	12 28	9·6
14	11·7	11·4	11·1	11·1	12·5	11·0	10·4	10·2	11·8	11·8	11·8	11·9	11·3	7 58	12·7	13 26	10·0
15	11·8	11·8	11·4	11·7	13·1	11·4	10·7	10·9	11·3	11·0	11·4	11·6	11·5	7 32	13·2	12 28	10·3
16†	11·6	11·7	11·2	11·3	12·2	11·9	11·1	10·8	11·8	11·2	11·3	11·3	11·5	8 18	12·7	12 50	10·4
17	11·6	11·2	11·2	11·9	12·0	11·9	10·2	10·4	12·7	11·4	11·7	11·8	11·4	16 4	13·1	11 50	10·2
18†	12·0	11·9	11·7	10·9	12·6	12·3	10·6	11·0	11·9	11·3	11·3	11·6	11·6	8 40	13·2	11 51	10·6
19†	11·8	11·7	11·5	11·2	12·5	11·9	10·1	10·7	12·1	11·4	11·3	11·4	11·5	7 48	12·7	11 44	10·0
20	11·9	11·5	11·5	11·3	12·7	12·1	8·9	10·1	11·9	11·3	11·3	11·2	11·5	22 38	13·2	11 23	8·9
21	12·7	12·0	11·8	11·5	12·3	12·0	9·8	11·1	12·2	11·5	11·4	11·5	11·6	8 40	13·0	12 12	9·5
22†	11·7	11·7	11·7	11·5	12·3	11·3	9·6	10·7	11·8	11·6	11·4	11·5	11·4	7 36	12·3	11 30	9·6
23	11·7	11·7	11·6	11·3	13·0	12·8	9·6	10·0	11·2	11·2	11·2	11·4	11·4	8 36	13·5	12 14	9·5
24	12·1	12·3	12·1	11·4	11·7	11·1	10·7	10·3	11·2	11·2	11·5	11·6	11·5	2 0	12·4	13 24	9·9
25	12·0	11·7	11·5	11·2	11·5	11·4	10·5	10·2	11·5	11·7	11·5	11·4	11·3	0 8	12·1	13 4	10·1
26	12·1	12·2	11·6	11·1	12·2	11·4	10·5	11·0	11·9	11·5	11·5	11·4	11·5	0 24	12·3	10 56	10·5
27	11·6	11·7	11·7	11·1	11·2	11·0	9·6	11·0	11·2	11·9	12·2	11·5	11·3	17 12	12·4	11 4	9·1
28	11·8	11·6	11·3	11·0	11·7	10·6	10·0	11·1	11·9	11·4	11·4	11·5	11·3	14 56	12·1	11 10	9·8
29	11·7	11·0	11·1	10·6	12·1	11·8	10·7	11·1	11·8	11·3	11·4	11·5	11·3	16 44	12·6	5 48	10·6
30	11·7	11·8	11·2	11·1	11·2	10·3	9·6	11·0	11·9	11·4	11·5	11·7	11·2	0 44	11·9	11 20	9·3
31	11·8	11·7	11·1	10·5	12·0	12·3	10·7	12·0	12·5	12·1	12·4	12·7	11·9	16 18	14·5	6 6	10·2
Mean.	11·8	11·6	11·5	11·4	12·5	11·6	10·2	10·8	12·0	11·7	11·7	11·7	11·6				
Mean†	11·8	11·8	11·6	11·4	12·7	11·8	10·1	10·6	12·0	11·5	11·4	11·5	11·5				

* See foot-note on page 48.

† Five international quiet days.

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0° PLUS TABULAR QUANTITIES.

Date.	Hours.												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1	12·2	11·3	11·3	11·3	12·3	12·1	9·4	10·1	12·0	12·0	11·8	12·2	11·5	16 44	13·7	11 36	9·3
2	12·1	11·4	10·9	10·3	11·6	11·8	11·2	11·7	11·9	12·2	12·1	12·3	11·6	8 38	12·4	5 22	10·0
3	11·7	11·5	10·9	10·9	11·9	12·9	11·2	12·3	12·0	11·9	11·9	12·0	11·8	9 4	13·1	5 4	10·1
4	11·7	11·5	11·3	10·8	11·3	11·7	11·1	12·6	12·1	11·3	11·4	11·4	11·5	14 52	13·1	6 14	10·5
5	11·6	11·6	11·1	10·8	11·3	12·6	11·4	11·3	12·1	11·4	11·2	11·4	11·5	9 38	12·6	6 36	10·5
6†	11·8	11·5	11·5	11·0	11·5	12·3	11·3	11·7	12·5	11·5	11·4	11·3	11·6	15 44	12·5	6 48	10·8
7†	11·6	11·3	10·9	10·4	10·8	11·6	11·2	11·2	11·4	11·4	11·3	11·2	11·2	0 0	11·7	6 16	10·1
8	11·4	11·4	11·1	10·8	11·1	11·9	11·1	11·7	12·1	11·7	11·7	11·4	11·4	14 44	12·1	6 18	10·7
9	11·6	11·4	10·7	10·4	10·2	10·7	10·3	11·0	12·0	11·6	11·3	11·4	11·0	16 24	12·1	6 36	10·0
10	11·4	11·1	10·9	11·0	10·1	10·7	10·0	11·4	11·4	11·6	11·4	11·6	11·1	22 4	12·1	11 52	10·0
11	11·7	11·5	11·4	11·2	11·2	11·4	11·0	11·4	12·0	11·8	11·5	11·5	11·5	16 18	12·1	6 40	11·0
12	11·5	11·3	11·3	11·1	11·0	9·9	10·2	11·3	11·7	11·4	11·3	11·3	11·1	15 48	11·7	9 36	9·9
13†	11·4	11·5	11·1	11·0	11·4	11·7	11·1	11·4	11·4	11·3	11·2	11·0	11·3	9 26	11·7	12 50	10·6
14	11·4	11·3	11·2	10·9	10·9	10·6	10·5	11·1	11·1	11·5	11·4	11·3	11·1	17 44	11·6	11 51	10·5
15	11·3	11·2	10·7	10·3	10·7	11·7	11·7	12·1	11·2	11·2	11·3	11·4	11·2	12 52	12·5	6 16	10·1
16	11·3	11·1	11·0	10·7	11·0	11·5	11·3	11·1	11·1	11·2	11·3	11·1	11·1	10 2	11·6	6 38	10·6
17	11·3	10·9	10·3	9·8	10·7	11·8	10·8	11·4	11·6	11·4	11·3	11·3	11·0	9 36	11·8	6 40	9·6
18†	11·2	11·1	10·8	10·5	10·3	10·3	10·0	11·1	11·8	11·6	11·3	11·2	10·9	15 16	11·8	10 28	10·0
19	11·2	11·1	10·8	10·6	10·6	11·2	10·8	11·7	12·2	11·4	11·3	11·3	11·2	14 44	12·3	6 24	10·2
20	11·2	11·0	10·3	10·1	10·0	10·4	10·8	11·5	11·8	11·4	11·2	11·1	10·9	14 56	12·5	6 44	9·9
21	11·4	11·2	11·0	10·5	10·3	10·8	9·8	10·4	12·1	11·5	11·3	11·2	10·9	15 48	12·1	11 36	9·8
22	11·2	11·0	11·3	11·1	10·4	10·9	11·1	11·6	11·8	11·6	11·5	11·4	11·2	14 56	12·1	6 44	10·1
23	11·5	11·2	11·1	11·0	10·8	11·4	10·1	11·2	11·8	11·6	11·4	11·2	11·2	0 48	12·3	6 32	10·1
24	11·3	11·2	11·1	11·1	10·7	10·1	9·2	10·6	11·8	11·6	11·3	11·3	10·9	15 56	11·9	11 44	9·1
25	11·3	11·1	11·0	10·8	10·5	10·5	10·6	11·5	11·2	11·5	11·3	11·2	11·0	13 48	11·6	10 56	10·1
26†	11·3	11·3	11·1	10·8	11·0	11·0	10·9	11·6	11·5	11·6	11·3	11·1	11·2	13 36	11·6	6 34	10·3
27	11·2	11·2	11·0	10·7	10·3	10·6	10·4	11·5	11·6	11·7	11·3	11·5	11·1	17 44	13·8	6 44	10·1
28	11·5	11·6	10·9	9·9	9·9	10·6	11·1	12·2	12·2	11·7	11·5	12·2	11·3	13 20	12·3	5 44	9·8
29	11·9	11·6	10·8	10·1	10·1	10·5	12·0	12·0	12·3	12·9	11·9	11·7	11·5	17 56	13·1	5 48	10·0
30	11·6	11·5	10·4	10·0	9·9	10·5	10·5	12·9	12·3	12·1	11·5	11·7	11·3	13 28	13·1	7 14	9·7
Mean.	11·5	11·3	11·0	10·7	10·8	11·2	10·7	11·5	11·8	11·6	11·4	11·4	11·2				
Mean†	11·4	11·3	11·1	10·7	11·0	11·4	10·9	11·4	11·7	11·5	11·3	11·2	11·2				

DECEMBER.

0° PLUS TABULAR QUANTITIES.

1	11·4	11·2	11·0	10·8	10·3	9·7	9·8	11·3	12·3	12·0	12·0	11·8	11·2	16 4	12·4	10 24	9·4
2	12·3	11·5	11·0	10·3	9·7	9·7	9·8	12·6	12·9	12·0	11·5	11·5	11·2	14 16	13·3	6 54	9·7
3†	11·6	11·5	11·1	10·8	10·8	10·6	10·8	12·2	11·7	11·3	11·3	11·2	11·2	13 44	12·2	10 24	10·4
4	11·3	11·2	11·1	10·9	10·3	10·5	11·2	13·4	13·0	11·6	11·4	11·3	11·4	14 28	13·5	8 56	10·0
5	11·3	11·2	11·0	10·7	11·0	10·5	10·7	11·9	13·2	11·3	11·1	10·7	11·3	15 28	13·3	11 4	10·2
6	11·5	11·1	11·2	10·9	10·6	10·9	10·6	12·0	12·0	11·9	11·7	11·8	11·3	14 56	12·4	4 56	9·7
7	11·7	11·4	11·1	10·9	10·6	10·9	10·6	12·1	12·2	11·6	11·5	11·4	11·3	14 24	12·8	11 4	10·1
8†	11·3	11·3	11·0	10·9	10·7	10·1	10·1	11·3	12·2	11·8	11·5	11·6	11·2	14 48	12·3	11 44	10·0
9	11·6	11·4	11·1	10·6	10·9	10·7	11·1	12·0	12·3	11·5	11·6	11·5	11·4	15 40	12·3	5 51	10·6
10	11·6	11·4	10·7	10·5	10·6	11·1	10·9	11·6	12·4	12·0	11·7	11·7	11·3	15 44	12·5	2 48	10·3
11	11·5	10·9	11·1	10·4	10·7	10·5	10·1	11·1	12·2	11·5	11·4	11·2	11·1	15 44	12·3	11 24	9·9
12	11·3	11·1	10·7	11·0	11·2	11·5	10·9	11·2	12·0	11·9	11·6	11·7	11·4	18 24	12·7	3 52	10·3
13	11·5	11·5	11·2	10·9	10·8	11·2	10·6	11·2	11·7	11·7	11·5	11·3	11·2	15 44	11·8	12 24	10·5
14	11·2	11·0	10·7	10·7	11·0	10·5	10·4	11·6	12·9	11·5	11·5	11·4	11·3	15 48	13·0	12 28	10·3
15	11·7	11·0	10·6	10·5	10·6	11·0	10·9	10·8	12·7	12·5	12·6	12·0	11·3	16 12	13·4	7 24	10·0
16†	11·2	11·2	10·9	10·7	11·0	10·9	10·5	11·1	12·1	11·5	11·5	11·4	11·2	15 50	12·1	11 56	10·4
17	11·5	11·3	11·1	10·8	10·7	10·6	11·3	11·8	12·5	11·6	11·5	11·4	11·3	15 32	12·5	10 16	10·3
18	11·3	11·0	10·5	10·5	10·3	10·3	10·2	11·4	11·5	11·4	11·4	11·3	10·9	14 28	11·6	10 12	9·9
19	11·3	11·0	10·8	10·7	10·8	10·3	9·9	11·1	11·5	11·4	11·3	11·2	11·0	16 28	11·7	10 56	9·7
20	11·2	10·9	10·6	10·5	10·1	11·0	10·4	11·1	12·1	11·7	11·6	11·5	11·0	16 20	12·2	7 4	10·1
21	11·4	11·2	11·0	10·8	10·4	10·5	10·0	10·5	11·9	11·5	11·4	11·3	11·0	16 16	12·1	11 50	10·0
22†	11·2	11·0	10·7	10·6	10·3	9·8	9·0	9·3	11·4	11·7	11·5	11·2	10·6	16 20	11·7	12 24	8·7
23†	11·0	11·0	10·7	10·7	10·7	11·9	9·9	10·3	11·6	11·7	11·4	11·1	11·0	9 40	12·0	11 44	9·9
24	11·1	10·7	10·4	10·4	10·7	9·9	9·4	9·9	10·9	11·5	11·2	11·1	10·6	17 36	11·5	11 40	9·4
25	11·0	10·9	10·6	10·5	10·3	10·3	9·6	10·1	11·7	11·9	12·3	11·5	10·9	19 58	12·5	10 44	9·5
26	11·1	10·7	10·3	10·1	9·9	10·7	11·5	10·9	11·5	11·9	12·2	11·7	11·1	18 44	12·8	7 4	9·6
27	11·5	11·0	10·5	10·4	10·3	10·8	11·7	11·2	11·2	11·5	11·6	11·1	11·0	11 4	11·8	7 20	10·1
28	11·3	10·9	10·6	10·3	10·4	12·3	12·7	11·3	10·5	11·3	11·3	11·3	11·2	10 40	13·1	6 52	10·1
29	11·4	10·9	10·6	10·2	10·4	11·7	11·7	10·0	9·8	11·3	11·4	11·2	10·9	11 38	11·7	14 48	9·4
30	11·1	10·8	10·6	10·7	10·1	11·1	12·6	10·5	10·9	11·4	11·6	11·5	11·1	12 20	12·7	7 4	10·0
31	11·2	10·7	10·6	10·4	10·6	11·5	11·6	10·9	11·2	11·2	11·2	11·0	11·0	11 40	11·6	6 48	10·1
Mean.	11·4	11·1	10·8	10·6	10·5	10·7	10·7	11·2	11·9	11·6	11·6	11·4	11·1				
Mean†	11·3	11·2	10·9	10·7	10·7	10·7	10·1	10·8	11·8	11·6	11·5	11·3	11·1				

* See foot-note on page 48.

† Five international quiet days.

JANUARY. 36000γ PLUS TABULAR QUANTITIES.

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean*	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	959	960	963	965	971	990	999	987	975	962	963	967	971	11 14	999	1 16	958
2	958	959	964	967	977	997	1007	987	977	966	962	968	975	11 36	1007	0 0	958
3†	962	966	967	967	985	989	996	989	977	969	968	965	973	11 10	996	0 6	957
4†	959	964	967	967	980	993	992	985	982	978	980	976	978	10 44	996	0 4	958
5	977	967	967	966	975	988	987	988	974	961	972	972	974	11 2	1006	17 8	953
6	959	963	968	974	977	982	981	976	969	967	974	962	972	10 58	985	0 20	958
7	967	963	973	977	986	970	959	949	959	952	944	944	962	5 16	1008	14 8	937
8	948	952	954	957	969	982	994	989	983	974	962	989	969	11 32	995	0 0	948
9	927	930	929	939	951	944	947	940	935	933	929	944	937	23 36	962	1 2	904
10	961	948	953	955	961	976	974	966	945	948	946	947	957	11 14	979	15 20	935
11	960	953	959	956	962	962	965	957	950	955	952	964	957	9 8	967	17 7	939
12	956	960	956	959	974	989	994	971	962	960	957	940	965	11 4	994	21 24	939
13	952	956	958	964	967	981	989	976	962	962	958	954	965	11 0	989	23 12	948
14	949	955	961	967	977	996	996	976	968	959	960	960	969	11 2	998	0 0	948
15†	969	959	962	965	973	985	993	973	965	964	964	964	969	11 22	993	1 38	958
16	966	967	969	980	990	1002	1005	999	976	970	967	938	977	11 4	1010	21 46	935
17	949	947	949	967	958	981	985	957	945	948	943	931	954	11 20	993	21 34	922
18	951	945	953	961	957	967	979	966	971	960	953	956	961	11 44	979	2 4	944
19	967	950	954	953	965	975	985	971	966	959	958	955	964	10 42	989	1 34	939
20	948	944	949	954	965	976	983	978	969	950	942	955	962	12 20	985	19 22	931
21†	956	955	959	960	961	964	974	975	967	966	965	966	965	12 34	978	1 42	952
22†	966	963	962	965	968	971	989	983	971	967	964	964	970	12 50	995	20 48	960
23	969	969	967	972	972	977	981	973	967	972	969	971	972	11 26	985	3 24	967
24	965	956	953	962	966	965	990	1012	1017	942	940	950	962	15 44	1020	22 48	868
25	919	932	958	968	961	971	941	943	919	949	941	921	945	9 45	975	0 10	912
26	938	942	946	959	958	948	959	941	942	946	948	949	949	6 40	961	16 20	936
27	954	962	954	971	977	969	965	958	961	957	956	961	961	7 51	977	3 0	953
28	959	958	961	966	983	993	982	977	965	956	958	963	970	10 12	994	14 8	949
29	966	965	968	970	977	984	990	975	970	967	963	963	972	11 0	993	2 40	959
30	969	968	967	971	988	1001	1004	990	976	975	974	972	980	10 20	1011	2 14	967
31	981	972	972	976	994	910	1013	985	962	932	854	900	961	10 14	1018	20 18	852
Mean.	958	957	959	964	972	977	984	974	965	959	955	956	965				
Mean.†	962	961	963	965	973	980	989	981	972	969	968	967	971				

FEBRUARY. 36000γ PLUS TABULAR QUANTITIES.

1	923	933	940	945	953	978	980	967	951	941	945	946	952	10 40	985	0 38	929
2	956	952	947	946	966	977	994	982	958	946	955	959	962	11 52	995	3 0	932
3	967	965	966	969	981	1001	1015	1012	1025	974	993	957	984	14 50	1044	23 40	917
4	928	963	960	948	963	969	981	973	960	961	962	960	961	12 2	982	0 24	927
5	953	960	974	968	964	973	983	988	979	973	956	963	970	13 28	989	19 34	947
6	965	965	974	975	985	986	999	978	963	968	972	962	974	11 51	999	19 0	949
7†	978	970	967	971	977	984	992	982	977	973	970	968	976	11 22	994	3 26	966
8	970	972	975	977	979	984	987	981	972	976	961	941	973	11 10	991	21 30	937
9	956	966	966	965	972	981	981	971	955	927	934	941	960	10 48	983	18 30	909
10	949	967	954	948	955	970	968	966	949	955	960	958	957	12 34	973	0 44	945
11†	955	957	961	963	979	994	995	983	959	953	957	961	969	11 16	998	17 0	947
12	971	981	993	973	988	1003	991	982	962	942	965	963	976	10 46	1007	17 30	931
13	952	968	951	956	971	988	988	963	931	949	949	956	962	10 38	993	15 48	930
14	960	962	958	959	951	980	997	985	968	964	966	962	968	11 12	999	7 28	949
15	968	971	970	970	959	954	916	921	928	935	931	949	945	1 6	980	15 0	896
16	947	945	952	952	950	949	940	893	887	927	916	937	931	9 36	955	14 50	878
17	933	939	945	943	951	967	958	957	951	939	935	941	949	21 0	970	20 38	927
18	933	948	947	954	948	954	973	973	962	955	955	951	954	10 18	979	0 0	933
19	951	956	949	957	955	961	969	967	964	965	952	952	959	12 14	971	20 56	940
20	963	977	970	979	979	984	994	980	980	971	965	969	976	11 42	999	3 56	961
21	972	973	973	979	981	994	993	972	968	935	963	972	975	9 10	1000	20 20	960
22	969	980	981	973	970	985	993	981	969	971	972	969	976	11 40	995	0 22	959
23†	971	969	973	974	982	1005	1020	1002	981	973	969	967	982	11 16	1021	21 48	967
24†	971	976	979	983	988	999	994	981	967	957	961	968	977	9 51	999	17 44	956
25†	971	974	973	974	975	992	1000	987	982	980	976	972	980	11 51	1000	7 12	969
26	974	982	983	991	1005	1010	1000	992	971	966	973	951	981	10 14	1013	23 34	936
27	937	946	966	967	985	1009	1010	998	938	954	965	956	970	12 20	1017	15 44	936
28	951	957	964	966	971	997	1013	1000	979	960	978	975	977	11 18	1013	0 18	948
Mean.	957	963	965	965	971	983	987	976	962	958	959	958	967				
Mean.†	969	969	971	973	980	995	1000	987	973	967	967	967	977				

* The daily mean ordinates derived from 24 hourly tabulations of H. F. magnetograms, corrected for the progressive change by 1/48 of the difference between the initial and the terminal hour (0 h to 0 h), are converted into C. G. S. unit by means of the scale coefficient for 1 cm. of ordinate; and finally these converted ordinates added to the base-line values corrected to the mean temperature of the day give the absolute values of the daily means of horizontal force.

† Five international quiet days.

MARCH. 36000γ PLUS TABULAR QUANTITIES.

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean*	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	979	984	983	980	982	987	998	983	970	954	917	964	973	10 38	1003	19 51	917
2	956	969	951	947	956	953	969	978	947	959	959	959	959	12 34	978	9 18	941
3	975	963	952	962	959	991	1017	1005	976	967	964	962	974	12 14	1019	2 30	947
4	964	971	962	983	975	986	982	968	961	945	948	955	965	11 12	999	0 42	939
5	959	957	966	966	984	1017	1045	1015	985	937	891	886	964	11 30	1046	22 36	855
6	884	894	917	923	937	967	978	964	958	944	948	938	941	11 42	983	0 16	879
7†	941	946	954	956	960	997	1012	991	966	959	957	958	967	10 18	1012	0 8	939
8†	959	958	959	962	963	978	990	972	956	955	948	952	963	11 12	991	20 30	942
9†	958	957	960	961	969	991	1009	991	963	966	964	950	970	11 48	1010	21 44	949
10	954	958	963	967	990	1015	1043	1007	980	958	936	924	975	10 10	**1058**	21 30	911
11	931	928	953	943	958	979	990	965	953	953	954	955	957	11 28	991	1 28	921
12	962	970	959	952	974	1013	1031	1007	955	932	954	937	971	10 54	1037	17 40	924
13	947	959	964	956	977	983	952	928	989	879	864	912	**937**	9 40	1005	19 16	**844**
14	951	927	955	933	945	967	982	911	895	936	902	926	938	12 4	997	17 0	879
15	904	953	915	925	943	955	958	952	937	948	942	944	943	10 20	971	0 0	904
16	955	970	965	961	960	985	985	972	956	950	954	956	963	10 12	992	17 28	940
17	960	969	972	972	978	1008	1012	1001	973	955	946	955	974	12 28	1017	20 48	934
18	944	953	959	953	961	978	994	953	956	949	946	950	958	11 14	1003	0 54	932
19	947	971	954	952	962	965	974	973	955	948	947	952	957	10 30	981	20 28	933
20	951	951	954	959	957	981	981	973	954	951	959	948	961	10 26	987	1 8	939
21	961	954	947	950	963	979	975	970	962	949	946	946	958	11 16	981	21 8	938
22	956	966	970	974	991	1012	1016	1015	997	978	971	967	985	12 2	1023	0 4	953
23†	984	970	960	961	972	992	1000	982	968	971	967	966	973	11 44	1000	2 54	957
24†	965	971	974	973	977	997	1009	992	971	968	963	963	977	10 50	1015	20 24	961
25	966	972	976	978	994	1042	970	962	924	918	933	936	964	10 4	1051	16 24	911
26	939	952	951	951	960	983	983	972	963	957	951	954	961	10 50	991	0 10	938
27	951	963	961	957	967	1006	1014	993	972	968	965	958	973	11 22	1016	0 0	951
28	961	967	975	970	987	1014	1022	1009	988	982	979	980	**987**	10 38	1023	0 24	957
29	981	968	980	987	980	1004	1001	986	986	988	950	946	977	10 26	1010	21 2	930
30	957	957	961	969	978	1001	1011	977	970	963	940	966	966	10 32	1017	21 38	933
31	956	974	975	953	949	978	955	968	952	939	949	942	957	10 8	988	18 22	919
Mean.	953	959	960	959	968	991	995	979	963	952	946	949	964				
Mean.†	961	960	961	962	968	991	1004	985	965	964	960	958	970				

APRIL. 36000γ PLUS TABULAR QUANTITIES.

1	946	960	957	956	964	979	993	979	957	947	955	954	963	12 6	995	17 36	941
2	956	956	959	961	977	1006	1013	999	980	960	959	965	973	10 56	1021	18 36	950
3	956	956	957	961	964	998	1011	994	973	959	955	960	971	11 36	1013	2 4	954
4†	960	962	963	962	964	991	998	993	981	969	965	964	973	11 10	999	0 0	960
5†	966	963	967	968	978	1014	1017	993	978	975	973	969	981	10 40	1022	2 30	962
6†	971	974	974	977	989	1021	1022	994	975	969	969	969	983	10 42	**1030**	21 14	967
7†	969	967	971	971	981	1018	1019	997	984	979	978	980	985	11 4	1030	1 51	967
8	978	977	985	990	998	1011	1009	990	978	963	956	936	979	10 14	1026	21 10	933
9	948	948	959	969	948	955	940	954	945	940	948	938	949	5 26	979	0 28	919
10	954	946	950	954	945	974	948	951	937	938	943	924	947	9 51	974	21 44	924
11	953	946	957	949	951	983	984	974	953	954	949	954	960	10 36	986	2 0	943
12	954	961	946	960	947	973	975	974	962	937	945	963	956	10 56	996	18 14	929
13	948	958	947	946	970	1005	1005	986	961	952	955	958	967	11 24	1015	5 38	944
14	950	951	950	953	962	992	1004	984	944	931	938	941	960	11 6	1008	16 36	927
15	950	956	951	965	969	1000	1001	963	962	955	953	957	967	10 50	1010	2 42	949
16	952	970	960	959	963	972	986	986	980	964	968	965	969	12 28	987	0 42	950
17	966	961	967	958	961	982	995	985	957	950	953	961	967	12 0	997	17 22	948
18	965	961	963	963	966	992	1003	995	979	965	951	957	972	11 12	1006	20 0	950
19†	959	958	960	964	984	1008	1006	987	978	972	967	965	976	10 44	1012	2 36	955
20	964	960	969	972	986	1007	1011	1007	1002	990	981	981	**987**	11 26	1013	1 34	959
21	973	967	972	966	972	1000	996	971	952	958	957	952	968	9 50	1000	23 44	928
22	932	938	940	957	954	955	982	936	906	943	941	936	936	8 48	973	12 14	**884**
23	941	949	955	958	961	978	979	978	970	965	963	954	963	10 42	984	0 0	941
24	948	959	960	962	953	973	984	958	926	941	933	940	955	11 36	995	16 4	916
25	954	953	955	960	965	987	991	977	959	952	946	941	961	11 38	997	18 30	941
26	956	953	963	952	966	966	966	945	956	958	952	949	958	8 32	981	22 22	937
27	951	963	964	961	971	987	959	963	950	947	954	960	961	10 44	993	12 26	933
28	954	971	960	954	952	982	987	965	955	955	952	956	961	10 22	991	19 12	946
29	947	957	953	962	984	1016	1006	974	966	948	955	958	969	11 0	1021	18 28	931
30	959	955	955	956	966	1004	1005	992	974	954	965	959	970	10 42	1009	18 38	944
Mean.	956	959	960	961	967	991	994	978	963	956	956	955	966				
Mean.†	965	965	967	969	979	1011	1012	993	979	973	970	969	980				

* See foot-note on page 54.
† Five international quiet days.

MAY. 36000 γ *plus* TABULAR QUANTITIES.

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	962	959	959	959	981	1015	1014	991	975	967	962	966	976	9 48	1015	2 40	955
†2	965	968	970	967	977	1018	1019	993	977	966	966	965	979	10 40	1025	1 12	963
†3	969	963	965	969	982	1007	1011	985	975	972	968	965	978	10 48	1015	3 28	964
4	968	964	971	975	989	1013	1017	1015	995	966	954	971	984	12 40	1026	19 59	952
5	975	975	973	987	1003	1023	1022	1005	981	973	973	978	989	12 38	1029	20 30	969
6	965	963	969	971	983	1001	992	976	963	960	961	961	971	10 42	1008	16 42	939
7	960	969	962	964	974	974	950	929	957	939	936	951	956	9 22	975	13 51	929
8	964	945	952	931	926	939	961	959	916	929	937	940	941	0 0	934	15 42	914
9	929	939	947	939	950	970	977	983	969	919	904	929	947	13 20	984	18 32	902
10	945	945	955	951	962	958	965	933	961	952	941	942	953	2 40	984	13 40	928
11	963	941	958	948	950	971	976	966	958	943	949	951	956	11 30	981	2 0	940
12	950	953	955	955	972	993	1006	991	973	960	962	963	969	9 16	1009	0 6	947
13	959	960	966	965	972	994	996	988	969	963	961	969	972	10 14	998	20 22	957
14	962	958	961	970	988	1011	996	989	978	960	956	951	972	10 22	1016	21 0	948
†15	958	969	965	968	975	983	994	987	976	971	970	961	973	11 51	994	0 14	957
16	964	965	964	971	977	1006	1019	1022	1000	981	977	925	983	13 30	1023	21 54	924
17	958	953	953	960	951	956	954	952	955	954	953	960	955	0 10	989	2 56	942
18	959	957	959	964	965	972	966	958	967	970	965	965	964	9 40	973	3 8	955
19	968	961	956	965	981	987	982	976	966	964	959	953	969	10 6	988	21 44	950
20	965	960	963	961	967	983	982	977	984	974	973	936	971	10 32	985	4 40	955
21	975	979	980	970	997	1023	1009	996	968	957	934	949	978	10 0	1026	20 32	932
22	964	975	968	981	999	1000	1008	997	964	957	957	958	976	8 28	1011	20 44	948
23	970	957	970	972	987	998	976	964	958	953	968	965	969	10 4	1004	17 32	948
24	958	970	970	963	973	989	972	946	955	955	955	970	967	9 24	992	14 10	939
25	967	973	965	967	986	1010	1009	1001	982	973	971	962	981	10 42	1021	21 20	957
26	977	965	964	962	970	997	1014	975	957	958	950	963	971	12 28	1016	20 8	932
27	967	967	977	972	971	976	1005	985	971	961	971	971	976	11 4	1005	2 54	960
28	974	978	972	970	998	1016	1029	1006	978	963	963	964	984	11 4	1030	17 10	955
29	968	970	966	969	981	999	1004	993	979	967	969	973	979	11 4	1007	3 34	965
†30	975	977	971	975	990	999	998	990	977	972	971	971	980	10 40	1001	3 30	969
†31	971	975	974	977	982	1000	1003	993	989	982	977	977	984	10 40	1005	0 0	971
Mea-.	964	963	965	965	976	993	994	981	971	961	959	959	971				
Mean†.	968	971	969	971	981	1001	1005	989	979	972	970	968	979				

JUNE. 36000 γ *plus* TABULAR QUANTITIES.

1	979	979	978	983	1001	1027	1037	1029	1010	993	994	991	1001	11 10	1037	2 36	978
2	998	998	1013	1007	1023	1051	1029	1020	983	965	965	944	999	9 46	1056	22 6	940
3	959	947	996	958	961	963	970	973	972	964	963	966	965	3 51	996	19 12	941
4	959	971	962	964	982	993	979	984	966	964	965	968	972	9 36	993	0 30	954
5	968	986	980	967	986	1000	983	935	954	951	949	955	969	9 56	1003	16 40	933
6	965	962	964	967	980	988	991	978	964	966	971	956	970	12 4	993	16 58	953
7	965	979	961	963	977	973	987	982	975	965	965	968	972	11 44	988	5 20	957
8	970	970	971	971	973	978	986	979	960	964	970	969	972	12 4	988	16 42	957
9	970	975	971	980	995	1005	998	985	969	960	965	967	979	8 48	1007	18 16	958
†10	969	967	963	967	983	999	1009	1000	968	964	967	968	977	11 18	1011	3 38	962
†11	969	967	967	971	982	1005	1022	1008	985	970	969	976	983	12 24	1023	4 38	964
12	976	986	982	986	987	988	1015	1007	981	970	970	971	984	12 34	1019	22 58	937
13	969	964	970	971	987	1003	1001	992	979	963	962	961	976	9 42	1004	23 40	953
14	954	958	973	981	975	983	1001	988	971	965	968	967	973	11 50	1001	2 50	950
†15	958	966	965	968	978	1000	1011	996	977	967	968	971	978	11 50	1011	2 4	965
16	970	971	967	969	975	1006	1002	987	971	973	985	1001	983	22 28	1039	6 20	966
17	988	972	975	965	951	971	980	969	969	951	957	951	965	1 6	991	20 48	941
18	965	963	960	976	952	1007	1014	1006	979	957	951	954	975	10 36	1016	21 18	949
19	958	958	969	968	982	1007	1009	982	964	961	953	960	973	10 6	1011	19 51	953
20	964	967	969	971	979	991	989	988	971	948	957	967	972	9 36	991	18 20	942
21	970	965	969	971	974	981	992	985	975	972	966	967	973	12 48	993	4 44	962
22	967	970	969	962	974	1000	1011	1009	984	965	971	952	978	12 50	1017	22 22	945
23	954	959	961	965	972	983	996	990	989	983	963	969	974	12 6	998	0 48	953
†24	968	967	967	965	966	965	979	982	975	966	968	969	970	12 40	985	8 56	957
†25	966	969	970	971	991	1007	1006	994	974	973	975	976	982	10 34	1012	0 0	966
26	969	977	976	980	982	992	992	994	963	965	972	975	979	10 24	997	16 4	960
27	980	980	977	980	996	1023	988	975	966	954	948	942	976	10 42	1029	21 36	941
28	955	970	963	963	981	995	1010	1005	975	963	962	959	976	12 40	1011	0 32	951
29	966	975	972	955	989	1012	1010	979	933	951	950	957	971	10 40	1014	15 24	921
30	958	960	948	951	972	978	987	976	921	933	943	936	955	11 42	988	18 32	911
Mean.	968	970	971	970	980	996	999	989	971	964	964	964	976				
Mean†	968	967	966	968	980	995	1005	996	976	968	970	972	978				

*See foot-note on page 54.

†Five international quiet days.

JULY. 36000 γ *plus* TABULAR QUANTITIES

Date.	Hours.												Mean*	Maximum.		Minimum.		
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.		Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H	M.	γ
1	946	944	944	947	950	962	982	977	947	951	955	946	957	12 6	984	1	26	939
2	956	968	957	951	957	966	984	974	962	956	954	968	963	11 8	987	5	50	951
3	958	960	955	958	955	985	983	977	966	955	956	956	963	10 22	994	16	38	940
4	958	951	953	956	955	980	1006	993	967	955	955	962	967	11 40	1007	2	10	948
5	959	958	960	958	972	1002	1004	991	998	966	964	957	973	11 20	1007	22	20	955
6	965	962	969	971	981	981	961	956	951	955	951	953	963	8 36	985	14	56	948
7	962	959	958	961	982	991	987	981	963	947	944	952	966	10 12	993	18	40	935
†8	956	955	965	963	972	980	985	979	968	964	961	963	968	11 10	993	0	18	951
9	961	959	962	971	987	1005	1014	1000	985	967	963	961	977	11 18	1014	20	34	952
10	957	964	964	969	985	996	1017	1003	989	969	964	958	980	11 36	**1018**	0	0	957
†11	975	971	971	971	969	981	984	981	970	965	964	963	971	11 4	985	22	0	962
†12	962	961	959	960	971	995	1011	996	981	966	966	967	975	11 40	1012	5	4	958
13	967	967	971	975	983	998	1015	1013	993	981	975	971	**985**	11 40	1015	0	28	966
14	970	974	975	975	985	995	997	981	979	972	961	965	976	15 20	1001	21	8	953
15	959	964	961	959	951	970	985	969	945	953	951	958	960	11 32	987	15	32	938
16	954	953	958	961	969	976	986	959	961	960	933	937	959	11 10	992	21	6	923
17	975	945	956	954	961	993	994	977	964	955	943	946	962	12 10	999	20	16	937
18	952	956	957	966	960	966	978	960	964	961	961	948	960	11 12	981	21	36	946
19	953	951	955	958	969	983	969	986	976	957	947	944	962	13 34	987	18	48	935
20	954	964	959	960	971	991	988	975	965	956	955	960	965	9 42	992	1	6	947
†21	959	957	952	953	964	983	995	979	964	960	956	959	965	12 16	998	4	44	951
†22	955	960	962	961	971	985	994	983	968	961	959	957	969	11 58	995	0	0	955
23	959	961	962	964	977	983	984	979	970	966	957	960	970	10 12	986	19	50	957
24	972	973	962	983	963	993	990	979	969	962	953	951	970	10 32	1003	19	4	947
25	962	952	953	964	973	989	1007	992	977	964	962	964	971	11 34	1007	2	6	949
26	963	963	968	965	979	1010	1009	991	981	974	941	909	967	12 0	1013	23	22	**886**
27	898	949	951	973	971	970	945	947	944	931	933	939	949	2 58	988	0	0	898
28	952	946	948	954	935	958	959	932	914	914	931	943	**942**	10 58	973	17	42	911
29	949	943	959	935	949	963	959	976	962	953	950	947	955	22 42	987	5	44	931
30	941†	946	954	950	953	956	961	971	957	956	946	948	953	14 32	976	5	6	935
31	951	951	952	947	957	970	983	983	959	952	951	954	959	11 24	984	3	10	942
Mean	960	958	959	961	967	982	988	979	966	958	954	954	965					
Mean†	961	961	962	962	969	985	994	984	970	963	961	962	970					

AUGUST. 36000 γ *plus* TABULAR QUANTITIES.

1	953	955	954	957	961	965	975	955	949	948	950	945	955	11 36	977	14	56	939
†2	945	946	951	951	955	969	956	966	965	963	959	951	957	10 10	970	0	14	944
†3	955	951	955	953	950	961	970	962	964	964	958	952	959	12 4	971	1	56	950
4	961	956	959	954	959	978	979	986	971	964	963	960	967	10 52	989	5	40	953
5	958	952	952	957	967	988	985	960	960	943	949	944	958	9 50	988	17	16	917
6	953	949	957	952	959	979	981	978	965	956	956	952	961	10 18	984	2	54	944
7	957	944	951	953	962	974	971	970	960	954	950	954	959	9 8	975	1	44	943
8	965	957	960	963	966	984	994	995	979	965	967	966	971	11 20	997	1	18	955
9	961	955	964	964	975	997	993	986	975	974	979	981	976	10 26	1001	2	4	954
10	962	969	943	961	943	952	958	962	953	944	945	944	951	0 42	978	8	50	936
11	952	937	948	957	957	967	988	980	947	928	883	898	943	12 12	1003	19	30	**871**
12	904	940	935	955	937	925	961	944	936	950	936	934	**941**	11 6	967	0	0	904
13	943	956	957	946	955	957	975	958	927	948	937	943	951	11 44	980	16	0	923
14	939	948	959	959	948	966	967	969	918	929	928	941	950	13 8	977	16	2	917
15	944	971	949	953	955	964	968	953	959	941	931	941	953	1 40	976	19	40	931
16	953	951	951	950	955	972	977	965	956	957	956	957	958	11 18	984	0	42	947
†17	959	959	961	954	965	975	981	977	966	957	963	963	966	11 14	982	5	48	954
†18	965	967	966	966	969	999	1004	995	980	973	973	971	**977**	12 4	1005	6	8	964
19	970	968	969	971	971	979	983	976	961	956	953	951	967	11 8	986	21	42	950
20	956	961	962	968	973	981	968	950	927	921	933	938	953	9 16	982	17	30	919
21	945	950	959	965	967	1005	1015	991	964	945	944	932	965	11 2	**1029**	22	42	923
22	926	939	945	952	960	976	979	981	961	955	943	945	956	13 22	986	0	14	923
23	954	958	968	972	969	994	1017	993	933	950	944	936	964	12 14	1026	20	44	922
24	946	949	950	957	956	985	993	960	950	953	954	956	959	10 6	999	3	22	939
25	950	953	959	958	957	963	971	967	966	959	966	965	962	11 6	977	0	4	949
26	964	972	971	966	957	980	984	965	952	953	952	958	963	11 16	990	16	24	947
27	954	960	961	958	952	965	975	977	951	949	954	957	960	12 50	979	16	16	943
28	955	948	956	953	944	963	974	966	960	964	958	951	959	11 58	976	7	42	943
29	968	962	959	959	964	1003	1016	988	970	944	955	963	971	11 44	1020	17	32	942
30	954	957	962	959	969	980	997	979	976	965	956	954	967	11 28	997	23	10	943
31	947	968	960	961	955	1010	1010	1001	957	951	957	952	969	12 42	1011	0	0	947
Mean.	952	955	957	958	959	976	983	973	957	952	950	950	960					
Mean†	956	954	958	955	957	973	977	973	967	964	962	957	963					

* See foot-note on page 54.

† Five international quiet days.

SEPTEMBER. 36000γ PLUS TABULAR QUANTITIES

Date	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*	Maximum Time	Maximum Mag.	Minimum Time	Minimum Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	966	957	957	959	958	981	996	985	961	965	950	964	967	12 26	997	19 10	948
2†	966	959	960	962	959	985	991	973	966	963	963	965	968	11 4	994	7 18	955
3	963	973	970	964	960	982	995	986	973	961	964	965	972	12 24	998	18 6	959
4	971	973	964	962	960	980	984	972	948	960	963	965	967	10 46	989	15 50	948
5	963	964	963	966	976	998	1000	990	976	957	963	961	974	10 38	1003	18 4	955
6	966	961	965	965	980	1001	1008	1003	973	940	933	946	969	11 22	1011	18 48	931
7	962	960	956	969	998	1002	987	938	939	943	923	956	959	8 38	1037	21 22	908
8	946	942	949	953	943	949	956	963	928	904	917	955	942	13 28	969	18 0	894
9	938	950	952	948	948	951	957	945	933	929	943	946	946	3 16	967	17 34	927
10	941	954	956	951	947	965	957	958	939	930	943	930	947	8 38	968	16 26	925
11	935	948	947	948	941	958	948	941	940	955	961	967	950	22 24	972	14 38	929
12	963	960	963	963	968	984	985	968	959	951	956	966	965	10 8	992	17 22	949
13	952	956	956	963	975	997	972	969	937	964	950	954	963	10 20	1000	15 42	937
14	951	954	952	955	947	951	915	871	838	800	824	854	900	8 50	961	18 0	798
15	859	876	924	907	909	942	943	924	921	915	931	916	916	10 40	949	0 22	858
16	909	942	938	946	949	965	967	958	947	945	942	942	948	10 38	974	0 36	908
17	944	944	947	949	954	971	977	977	940	930	944	948	952	13 30	980	16 40	926
18	946	936	953	946	951	977	979	976	965	961	959	959	959	11 34	983	0 46	933
19	955	955	960	950	939	961	983	966	958	957	954	950	957	11 12	984	7 51	939
20	950	951	957	961	959	966	980	982	955	967	953	941	961	13 12	986	20 12	935
21	943	949	953	952	942	955	955	933	935	929	940	944	947	0 13	988	17 58	926
22†	947	946	943	944	935	953	963	958	951	955	952	952	950	11 38	984	7 30	933
23†	958	958	960	961	958	962	975	973	961	965	957	948	961	12 22	981	22 8	945
24†	953	952	952	957	955	973	968	965	949	945	946	952	956	10 40	977	18 45	941
25	954	959	958	958	953	970	964	961	944	946	940	951	955	10 5	973	19 28	936
26†	959	955	957	956	947	962	982	971	963	959	958	955	960	17 8	983	7 40	947
27	956	956	958	970	982	996	992	995	982	968	969	956	972	12 54	1002	22 56	934
28	942	965	956	959	943	956	964	945	952	953	944	952	952	1 28	971	8 26	936
29	961	950	953	951	956	979	988	980	960	957	961	957	962	12 24	992	16 44	946
30	953	954	961	954	957	973	980	979	959	958	956	949	961	11 26	989	23 0	942
Mean.	949	952	955	955	955	971	974	967	948	944	945	949	955				
Mean†.	957	954	954	956	951	967	976	968	958	957	955	954	959				

OCTOBER. 36000γ PLUS TABULAR QUANTITIES

1†	957	956	956	954	953	965	979	976	966	963	949	953	961	12 10	983	19 51	949
2	953	958	958	957	949	969	984	979	979	975	955	956	966	11 51	984	7 40	949
3	969	956	953	958	950	961	959	961	950	955	957	955	957	11 16	972	23 40	947
4	947	963	963	953	952	966	977	955	939	965	953	952	957	11 25	981	15 26	928
5	968	975	964	967	945	932	940	921	868	880	841	855	916	2 10	978	20 50	821
6	893	911	919	927	916	937	945	934	939	940	906	952	928	22 4	956	0 0	886
7	943	939	941	949	942	957	959	937	931	939	931	943	941	11 6	962	18 52	921
8	942	955	949	950	932	953	962	958	948	926	939	943	948	11 22	973	17 30	925
9	950	981	959	952	960	985	990	976	961	950	950	954	963	10 35	998	1 10	943
10	959	976	960	956	974	1001	1010	993	969	957	951	936	970	11 30	1016	21 40	935
11	956	968	952	960	967	980	993	975	971	960	955	956	966	11 35	995	3 44	951
12	965	965	969	971	972	988	995	971	950	931	923	932	960	11 2	999	20 15	922
13	955	961	962	966	973	993	1008	995	979	960	969	959	973	11 49	1008	0 15	954
14	963	967	971	973	968	983	998	988	950	928	941	940	965	12 48	1001	18 50	920
15	947	959	963	961	964	988	1011	989	969	965	961	954	970	11 34	1014	0 2	945
16†	970	967	971	972	981	980	995	977	971	969	967	967	975	12 2	996	21 8	965
17	970	972	975	976	983	997	1004	977	941	937	927	944	966	11 28	1006	19 30	925
18†	957	958	964	969	979	995	1010	992	972	973	970	963	975	11 51	1010	0 18	943
19†	966	969	971	976	984	1002	1009	992	983	979	975	972	982	11 51	1009	0 0	965
20	964	973	966	974	985	999	1018	986	974	965	957	929	972	11 28	1023	21 18	927
21	970	962	962	965	976	992	991	981	965	959	957	961	970	11 0	997	3 42	955
22†	964	965	968	970	980	997	1014	991	976	971	965	967	978	11 35	1016	0 16	963
23	968	970	972	974	980	993	1014	998	983	980	973	954	979	11 24	1016	23 4	948
24	947	961	967	976	979	997	1006	992	987	940	945	979	972	12 14	1007	18 26	926
25	954	963	970	972	973	984	994	995	982	946	946	961	971	12 30	1001	18 14	936
26	962	953	960	965	968	977	991	974	967	964	962	965	968	11 22	994	0 30	951
27	970	969	975	972	983	997	1017	999	976	953	961	950	975	11 28	1019	21 2	942
28	962	964	967	969	969	975	994	980	973	974	974	970	973	11 36	995	0 4	960
29	968	984	973	977	980	998	1001	974	957	964	971	970	976	11 22	1008	16 34	939
30	969	965	966	967	971	980	992	981	976	974	970	966	973	11 24	993	1 51	965
31	974	979	987	960	968	972	983	931	945	930	941	923	957	3 28	999	21 40	913
Mean.	957	963	963	964	966	981	992	975	961	954	950	951	965				
Mean.†	963	963	966	963	976	988	1001	985	974	971	965	964	974				

* See foot-note on page 54.

† Five international quiet days.

NOVEMBER. 36000γ PLUS TABULAR QUANTITIES

Date	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean	Maximum Time	Maximum Mag.	Minimum Time	Minimum Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	938	965	944	939	957	966	974	957	947	947	948	932	953	11 36	978	21 35	929
2	945	954	959	961	957	966	967	963	961	948	933	938	955	20 34	969	19 46	930
3	954	962	968	972	966	968	985	963	953	950	953	931	959	11 48	987	18 55	927
4	944	957	953	958	971	981	990	958	957	955	953	953	961	11 22	990	0 0	944
5	960	959	964	968	979	995	1002	985	964	951	959	957	971	11 10	1006	17 51	951
6†	956	962	959	964	973	999	999	977	969	966	960	959	971	11 4	1006	0 0	956
7†	960	967	967	969	984	990	992	975	967	965	963	965	973	10 50	999	0 0	960
8	964	965	969	973	992	1010	1009	994	980	963	962	961	979	10 50	1013	19 18	952
9	959	966	969	979	1004	1017	1010	1000	988	976	971	969	985	10 10	1018	0 0	959
10	980	990	970	971	980	984	994	978	968	974	968	950	975	10 40	997	21 40	950
11	953	955	950	958	973	987	988	975	962	955	957	953	965	10 42	993	0 44	945
12	959	962	962	962	978	992	999	986	974	971	967	966	973	11 32	1000	0 24	958
13†	967	967	966	969	977	997	1003	983	978	974	970	971	978	11 30	1003	3 47	965
14	974	972	969	971	986	1001	997	983	977	971	971	985	981	10 15	1005	2 42	968
15	984	979	980	984	988	1002	1008	991	987	982	946	964	983	11 20	1012	20 28	930
16	977	973	973	974	992	995	997	987	976	974	973	978	982	10 45	1007	4 8	970
17	977	981	985	992	994	999	1002	985	976	968	965	964	982	7 44	1010	21 4	963
18†	978	973	973	973	984	1008	1013	992	973	960	962	965	979	10 40	1014	19 25	958
19	967	969	972	976	990	1006	1005	993	979	970	962	970	980	10 42	1010	20 25	960
20	971	978	985	978	994	1005	1009	991	984	979	971	974	984	9 56	1006	19 15	970
21	976	977	981	984	1000	1007	1000	996	973	972	972	977	985	9 44	1012	16 20	965
22	975	979	973	972	994	995	1001	992	979	975	973	972	983	11 0	1005	22 56	968
23	974	970	975	970	985	991	995	978	971	969	970	971	976	12 0	996	1 15	962
24	974	976	973	975	985	995	1001	991	977	970	972	971	980	11 40	1002	17 32	970
25	974	973	972	975	984	994	992	983	975	971	968	969	978	10 32	995	20 10	966
26†	977	974	973	974	988	996	1010	997	985	982	978	979	985	11 20	1015	2 46	971
27	979	979	980	982	991	1000	999	987	980	970	981	987	985	10 55	1004	17 25	968
28	983	969	961	960	972	980	972	958	944	947	953	947	961	10 32	982	21 28	943
29	953	961	968	963	967	999	961	947	938	904	944	961	956	10 4	1001	18 8	903
30	965	953	964	967	963	971	969	963	955	951	960	949	960	11 6	974	17 35	929
Mean.	967	969	969	970	982	993	995	980	970	964	963	963	974				
Mean†	968	969	968	970	981	998	1003	985	974	970	967	968	977				

DECEMBER. 36000γ PLUS TABULAR QUANTITIES

1	956	960	963	966	985	999	997	982	958	940	962	941	967	10 28	1007	21 10	936
2	943	960	966	971	983	995	984	972	965	960	961	960	969	10 10	997	0 4	942
3†	965	966	965	969	976	987	995	977	967	968	966	968	973	12 4	996	0 24	964
4	969	968	965	967	985	995	979	969	970	966	963	966	972	9 42	996	19 40	962
5	968	971	971	973	986	1027	1029	1007	976	978	972	975	986	11 6	1044	23 6	964
6	971	972	964	980	969	974	974	973	969	957	955	964	969	10 48	984	20 40	949
7	963	967	971	975	984	987	985	973	964	966	961	969	973	10 26	988	19 2	958
8†	970	970	971	970	981	993	991	973	965	959	966	968	973	10 28	996	17 40	957
9	965	968	969	971	980	993	987	979	973	967	968	969	975	9 51	993	0 0	965
10	971	971	991	988	990	999	971	975	980	971	966	965	978	9 10	1013	20 36	957
11	977	978	971	975	981	996	1005	996	988	978	975	977	983	12 24	1007	4 2	967
12	975	978	983	974	968	978	982	978	961	960	962	960	971	4 12	990	18 10	956
13	970	961	962	969	976	980	975	977	967	970	970	973	971	10 28	982	2 6	958
14	976	979	973	978	986	1004	999	978	963	955	963	973	977	9 12	1009	18 10	944
15	967	978	974	978	986	983	970	970	959	948	951	948	969	0 26	1004	22 26	941
16†	976	960	959	968	971	976	977	969	972	971	971	970	969	11 40	979	2 20	959
17	971	971	970	972	984	992	997	991	982	972	970	972	979	11 20	999	2 42	968
18	971	977	982	980	988	994	1000	997	992	988	983	979	987	12 20	1001	0 0	971
19	980	979	979	980	988	1007	1020	1003	986	981	982	980	989	11 20	1020	19 0	977
20	977	980	978	982	986	988	1007	1001	990	975	970	973	984	11 54	1008	19 20	966
21	975	976	974	979	981	998	1011	991	980	975	973	976	983	11 15	1015	19 6	971
22†	976	978	980	987	986	997	1001	993	983	979	979	979	985	12 26	1003	0 2	975
23†	974	980	979	980	986	1002	1016	1000	990	981	982	983	989	11 58	1017	0 10	973
24	986	985	989	993	991	995	1007	1000	988	982	980	980	989	12 30	1008	18 22	977
25	983	984	993	990	990	1001	1011	998	977	980	961	963	987	12 16	1013	20 10	955
26	977	978	979	984	1004	1008	988	951	955	960	921	953	972	8 33	1010	19 48	918
27	952	960	964	972	974	988	990	973	972	967	967	968	972	11 14	990	0 0	952
28	972	972	974	979	984	993	993	977	979	981	975	971	979	11 4	997	21 40	967
29	968	975	982	980	984	993	999	978	972	975	977	968	980	11 40	1000	21 56	964
30	971	975	979	975	981	988	969	970	953	953	938	946	965	9 48	989	20 30	935
31	957	964	969	976	988	999	994	996	980	973	970	972	979	10 8	1002	0 0	957
Mean.	970	972	974	977	983	994	994	983	973	969	966	968	977				
Mean†	972	971	971	975	980	991	996	983	975	971	973	974	978				

* See foot-note on page 54.

† Five international quiet days.

JANUARY. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours.												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	269	267	265	264	264	260	261	267	265	259	261	264	263	2 10	273	21 30	256
2	264	264	266	267	271	286	280	286	287	284	286	283	278	15 28	287	3 40	263
3†	292	291	290	290	297	288	286	296	288	287	286	285	289	8 28	300	11 40	282
4†	287	284	285	283	288	285	283	284	282	278	284	276	282	8 28	291	22 24	273
5	276	274	270	268	267	257	259	266	270	268	266	264	267	0 24	277	11 0	242
6	267	265	262	262	263	274	254	252	267	269	268	266	264	9 20	275	12 48	249
7	270	266	263	264	265	276	260	251	254	255	255	255	260	9 14	282	14 4	246
8	258	257	258	259	262	268	259	266	270	267	267	263	263	16 24	276	12 40	253
9	267	269	269	274	282	282	277	282	279	281	280	279	277	9 0	288	1 2	260
10	283	282	283	283	290	286	289	287	283	285	282	280	284	9 20	293	21 48	275
11	280	278	276	276	287	280	284	268	265	267	266	267	273	8 12	288	14 56	258
12	263	263	262	262	267	274	272	272	256	264	263	262	265	10 36	277	16 12	250
13	259	259	259	257	264	272	266	267	259	267	265	266	263	13 0	275	14 44	249
14	266	265	264	264	267	269	264	264	267	266	267	265	266	16 46	270	14 36	254
15†	265	263	263	266	277	266	270	279	272	266	269	269	269	8 16	281	3 24	259
16	269	264	263	263	264	266	262	267	259	260	261	262	263	13 12	273	11 8	253
17	262	259	256	263	256	255	269	282	277	278	281	281	269	12 40	284	5 20	248
18	275	274	275	274	276	277	287	287	291	282	283	287	281	12 32	294	3 12	269
19	281	280	282	282	280	253	259	274	276	274	275	275	275	2 28	285	10 32	245
20	272	273	271	271	278	252	267	282	287	279	277	280	275	14 44	288	9 24	251
21†	281	279	281	283	286	253	243	273	292	284	286	287	278	15 40	293	10 44	240
22†	289	290	290	293	308	289	287	303	308	306	309	308	299	15 12	312	11 0	283
23	307	305	306	306	318	266	281	299	304	301	300	297	300	8 24	319	10 36	258
24	297	296	295	295	302	284	286	293	301	297	293	292	295	8 20	303	10 28	271
25	291	291	284	290	299	285	283	283	289	285	285	282	287	8 28	304	10 16	276
26	281	280	279	277	288	286	281	295	283	281	283	283	283	8 28	295	16 44	272
27	280	277	276	278	281	264	251	261	267	265	265	264	268	8 28	282	11 20	246
28	263	261	261	261	268	264	261	266	261	261	263	263	263	8 24	271	16 30	256
29	263	260	258	258	261	239	259	279	278	273	273	274	266	13 24	282	10 16	238
30	276	275	276	278	279	267	272	293	295	280	286	286	281	14 48	299	10 56	263
31	288	287	287	283	281	277	276	299	299	285	290	291	286	16 12	305	11 8	262
Mean.	276	274	273	274	279	271	271	278	278	276	277	276	275				
Mean.†	283	281	282	283	291	276	274	287	288	284	287	285	283				

FEBRUARY. 17000 γ PLUS TABULAR QUANTITIES.

1	285	283	283	282	278	272	288	307	303	283	286	285	286	14 28	308	9 40	266
2	281	278	277	276	269	254	256	283	288	273	277	275	273	14 40	292	10 36	242
3	269	271	273	273	269	266	262	277	275	264	271	271	271	15 20	282	12 8	253
4	273	274	274	281	285	283	282	287	302	286	287	290	285	15 24	303	12 56	265
5	286	287	283	287	292	291	285	303	305	294	292	293	293	14 42	307	3 48	278
6	292	292	288	288	285	274	288	299	297	284	278	279	287	14 4	301	9 56	273
7†	277	277	276	277	279	283	281	300	295	288	290	288	285	13 52	301	4 48	271
8	290	290	291	290	292	276	274	286	287	283	285	277	284	7 4	293	10 44	264
9	282	283	277	277	283	294	295	308	298	293	291	294	291	13 8	309	6 40	275
10	297	295	293	289	288	277	285	297	293	285	286	287	289	13 40	298	9 22	272
11†	288	287	287	285	284	273	280	294	285	281	287	285	285	13 16	296	10 28	270
12	291	291	288	287	281	271	286	292	285	277	282	283	284	13 24	294	10 0	264
13	288	292	284	280	271	267	283	302	293	279	277	280	283	13 0	306	9 20	265
14	289	290	287	285	271	269	285	306	285	269	275	274	282	13 40	306	17 20	263
15	286	281	277	276	267	266	285	305	292	282	283	281	282	13 50	305	8 32	256
16	285	287	284	282	279	257	268	289	272	269	273	271	277	13 44	289	9 44	256
17	292	276	273	274	262	261	273	293	280	277	274	279	275	14 32	295	9 24	257
18	283	280	284	279	271	262	261	274	280	272	275	275	275	2 20	284	11 36	257
19	272	275	273	270	263	250	266	284	280	276	279	278	273	12 16	284	9 18	250
20	279	279	279	275	275	275	264	275	271	266	269	270	273	3 54	280	11 40	263
21	270	271	273	276	272	278	283	289	291	281	284	284	280	15 58	292	4 52	268
22	284	284	283	284	273	271	280	293	289	286	289	290	284	13 50	293	8 36	267
23†	292	291	293	297	290	283	295	311	309	300	302	302	298	13 50	311	9 30	282
24†	299	298	297	300	293	282	286	295	296	291	294	297	294	5 50	300	9 48	277
25†	294	295	294	296	293	294	296	305	306	295	298	299	297	14 36	310	9 8	284
26	299	298	297	299	296	269	272	287	286	276	283	287	287	6 32	301	11 32	265
27	287	287	287	286	277	270	271	288	292	286	292	293	285	15 4	296	11 24	265
28	291	289	288	286	287	257	259	279	276	275	276	278	278	0 12	292	10 24	250
Mean.	286	285	282	283	279	272	278	293	290	281	283	284	275				
Mean †	290	290	289	291	288	283	288	301	298	291	294	294	292				

*The daily mean ordinates derived from 24 hourly tabulations of V. F. magnetograms, corrected for the progressive change by 1/48 of the difference between the initial and the terminal hour (0 h. to 0 h.) are next converted into C. G. S. unit by means of the scale co-efficients for 1 cm. of ordinate; and finally these converted co-ordinates added to the adopted base-line values give the absolute values of the daily means of vertical force

†Five international quiet days.

MARCH. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours.												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	λ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	274	272	271	269	273	272	274	284	281	278	275	280	276	14 48	293	4 44	260
2	280	282	279	274	277	256	263	278	279	265	269	271	273	0 44	284	0 30	249
3	269	269	270	273	272	266	263	281	282	275	278	279	274	14 24	287	11 12	258
4	279	279	277	277	273	243	247	258	266	267	270	274	268	0 30	282	10 32	237
5	273	275	274	276	279	274	272	290	287	280	284	294	280	21 48	295	11 16	262
6	286	286	291	292	290	275	275	281	289	284	284	286	285	6 24	295	10 16	270
7†	282	282	284	288	279	275	279	293	296	279	283	282	284	14 44	301	11 12	269
8†	278	278	278	278	280	262	253	271	284	287	291	293	278	23 24	295	10 36	252
9†	296	295	298	299	299	294	284	302	303	298	301	304	298	14 20	305	12 16	281
10	303	306	306	309	309	292	292	298	305	292	300	299	301	6 28	311	12 30	283
11	304	303	305	307	307	303	305	305	305	309	305	306	305	18 0	310	9 30	297
12	306	308	306	306	310	274	266	286	293	277	285	289	291	7 16	314	11 28	265
13	285	285	283	289	291	285	278	287	291	289	289	302	289	21 40	306	12 36	271
14	302	297	296	296	302	283	266	273	281	269	282	281	285	0 40	303	12 10	257
15	276	275	270	276	277	282	267	278	285	276	283	285	278	15 20	292	12 30	261
16	288	285	285	285	289	276	261	278	274	269	273	274	278	7 48	290	12 0	260
17	278	275	273	273	281	273	269	277	287	279	279	283	277	15 18	288	12 20	268
18	290	289	291	286	294	279	270	287	291	281	282	284	285	7 40	296	11 16	265
19	285	283	283	284	289	289	285	289	295	287	288	290	288	22 20	297	1 48	283
20	296	290	289	292	298	283	281	291	287	277	280	282	286	7 40	299	12 30	274
21	283	280	278	278	277	276	270	281	291	282	284	286	280	15 8	292	12 36	269
22	286	285	285	283	291	279	262	276	287	283	290	293	284	23 16	294	12 4	260
23†	293	290	290	288	297	299	281	292	307	298	302	302	296	15 40	310	12 36	276
24†	303	302	302	300	307	290	279	290	297	290	295	299	296	7 24	311	12 28	275
25	292	291	290	290	301	284	271	287	291	288	299	301	291	20 8	303	11 56	270
25	299	298	296	295	295	284	275	294	292	284	289	292	291	2 0	300	11 28	274
27	288	288	287	289	287	285	271	288	293	285	290	293	287	15 0	298	12 0	268
28	289	288	287	288	294	279	267	281	283	280	284	288	285	7 24	295	12 4	265
29	290	286	286	287	295	283	263	287	285	282	289	291	287	6 56	298	12 8	262
30	294	294	293	298	306	289	274	293	287	294	299	296	295	7 8	309	11 36	271
31	301	301	302	303	307	290	281	299	306	302	297	303	299	7 16	311	12 0	277
Mean.	289	288	287	288	291	280	272	286	290	283	287	290	286				
Mean.†	290	289	290	291	292	284	275	290	297	290	294	296	290				

APRIL. 17000γ PLUS TABULAR QUANTITIES

1	311	305	305	304	300	292	288	297	295	295	298	299	298	0 0	311	11 32	286
2	299	299	296	292	294	285	271	288	298	297	293	294	292	1 0	301	11 48	269
3	297	296	296	295	299	280	265	285	290	287	285	288	289	7 8	302	11 36	265
4†	284	283	282	281	288	276	264	276	281	276	273	274	279	7 4	293	11 52	263
5†	271	270	269	271	277	238	237	273	285	288	287	294	272	23 4	296	10 44	232
6†	295	297	298	301	298	288	281	300	302	292	294	297	296	6 28	305	12 0	280
7†	300	301	301	307	296	287	281	293	301	298	298	302	297	6 24	308	11 40	281
8	301	301	301	306	302	294	286	295	303	299	305	310	301	23 12	311	11 28	282
9	310	307	309	314	307	285	276	293	300	300	302	303	300	6 16	315	11 46	275
10	301	301	303	305	309	297	299	322	320	311	313	318	309	14 24	327	10 40	290
11	316	317	317	321	309	275	281	302	301	293	296	299	301	5 50	321	10 40	270
12	301	297	298	300	293	269	272	292	304	299	303	306	295	6 28	308	10 28	260
13	307	306	302	304	308	285	279	297	299	293	295	295	297	7 28	310	11 32	271
14	297	297	294	295	288	272	266	277	287	285	290	292	286	5 20	299	11 8	261
15	295	293	292	293	316	276	273	278	295	295	292	293	291	6 36	317	13 12	271
16	293	291	291	289	295	279	269	285	294	287	289	291	288	7 8	295	11 36	266
17	291	292	290	288	288	265	258	269	283	277	279	282	280	6 40	296	12 20	255
18	284	282	281	281	275	257	257	271	279	277	278	281	276	6 40	287	12 12	253
19†	280	280	277	279	271	265	257	270	281	284	286	293	278	23 5	294	11 8	253
20	293	294	295	299	294	284	279	292	298	301	303	309	296	23 20	312	11 40	279
21	311	311	311	311	319	308	302	308	313	309	314	320	313	23 0	321	11 36	299
22	314	312	314	311	309	299	311	322	319	312	314	317	314	15 0	325	9 50	299
23	312	312	312	315	310	292	275	297	306	298	301	307	304	6 24	317	11 52	273
24	303	299	299	310	291	274	274	283	298	293	293	298	293	5 56	311	11 14	271
25	290	290	289	297	279	255	259	279	288	285	290	294	284	5 44	297	10 52	248
26	298	299	300	312	294	279	282	302	301	300	304	306	299	5 50	312	10 6	275
27	308	309	303	312	303	286	292	304	308	303	301	306	303	6 28	313	10 52	281
28	304	303	305	309	299	283	285	299	303	303	303	306	301	6 16	313	10 16	281
29	308	305	306	312	312	285	288	305	306	305	301	306	303	6 48	318	11 6	280
30	303	301	303	308	289	286	290	306	309	303	301	308	301	14 40	310	10 42	279
Mean.	299	298	298	301	297	280	277	292	298	295	296	300	295				
Mean.†	286	286	285	288	286	271	264	282	290	288	288	292	284				

* See foot-note on page 60.

† Five international quite days.

MAY. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours.												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	306	306	305	309	297	281	281	303	307	297	297	299	299	6 4	310	10 40	275
2†	299	298	296	303	287	260	273	293	303	295	297	299	291	5 50	303	10 12	259
3†	295	296	297	300	299	275	273	283	293	292	295	295	292	6 32	303	11 0	269
4	295	297	297	305	301	282	283	299	303	305	299	303	297	6 20	308	10 36	276
5	302	303	304	309	304	287	281	297	300	297	297	300	298	7 0	312	11 28	278
6	300	297	297	302	296	273	279	296	305	299	298	302	295	16 44	306	9 48	272
7	302	302	302	307	282	278	285	305	306	301	305	306	298	5 32	307	8 50	276
8	310	311	307	309	294	298	304	312	316	311	310	312	309	15 4	317	8 28	289
9	308	309	307	312	297	273	277	291	292	291	294	299	296	5 50	312	10 46	270
10	303	303	300	307	291	285	283	298	308	299	306	308	300	15 12	311	11 14	281
11	309	309	310	317	304	269	277	302	306	313	309	313	303	5 40	317	10 40	266
12	313	311	312	316	309	286	293	312	321	314	313	316	310	15 56	323	10 4	283
13	318	316	316	319	318	285	276	305	310	301	301	305	305	6 40	325	11 24	270
14	302	309	296	300	300	279	285	294	298	294	292	296	295	1 30	309	10 8	275
15†	295	292	290	292	301	277	271	281	284	284	287	289	287	7 20	304	11 48	267
16	285	286	285	289	289	268	262	279	292	283	286	293	283	7 0	295	12 8	261
17	291	290	290	293	286	261	266	281	292	294	295	299	287	22 56	301	10 20	259
18	301	300	300	307	303	287	288	290	292	296	297	300	297	5 50	307	10 0	286
19	299	301	303	309	304	287	293	300	298	301	303	304	301	6 40	312	10 28	282
20	301	301	301	306	302	299	297	311	319	316	315	316	307	15 40	319	10 56	293
21	315	317	314	323	308	291	311	304	308	303	309	310	309	6 8	324	9 8	278
22	310	311	310	311	308	298	293	309	305	299	303	306	305	5 38	313	11 0	289
23	307	311	306	310	311	286	280	296	300	292	294	299	300	7 0	313	11 36	279
24	300	30	299	308	302	304	310	312	311	316	310	312	307	18 0	317	9 10	295
25	315	315	315	320	313	287	292	309	315	302	302	304	308	6 36	325	9 50	287
26	307	308	308	318	304	288	291	310	314	309	315	313	307	6 20	320	10 30	284
27	319	320	321	328	323	295	297	308	315	313	311	313	313	5 40	334	11 0	293
28	315	313	314	320	305	277	293	324	333	325	322	324	314	15 20	334	10 16	272
29	323	323	323	331	323	291	284	296	304	299	299	302	308	5 50	331	12 30	280
30†	305	304	304	309	304	293	289	300	304	305	305	307	302	5 40	311	11 0	285
31†	310	308	307	316	302	273	268	297	317	317	314	318	305	17 24	319	11 28	264
Mean.	305	305	304	310	302	283	285	300	306	302	303	305	301				
Mean†.	301	300	299	304	299	276	275	291	300	299	300	302	295				

JUNE. 17000 γ PLUS TABULAR QUANTITIES.

1	318	317	318	324	313	296	276	306	321	313	317	318	312	6 48	325	11 20	272
2	319	319	318	320	313	290	285	295	307	306	305	309	307	6 4	321	11 20	283
3	310	312	306	315	307	285	273	297	300	301	300	303	300	5 50	315	11 32	270
4	301	302	298	302	297	275	267	279	288	286	287	288	289	1 50	302	11 20	264
5	290	290	290	293	285	263	271	283	290	287	290	291	285	6 10	296	9 48	262
6	290	290	290	291	285	266	272	289	307	309	313	318	294	22 16	321	9 44	261
7	315	318	319	322	318	312	309	322	329	325	327	327	320	15 0	329	11 0	307
8	327	327	328	332	324	303	303	312	316	315	313	313	317	5 36	333	11 8	292
9	316	314	310	317	312	299	286	302	315	312	314	316	309	6 4	319	11 16	285
10†	318	314	314	319	312	299	292	303	317	314	315	316	311	5 50	319	11 20	285
11†	313	312	313	315	305	282	289	305	316	311	311	313	307	7 8	316	9 24	282
12	310	309	307	315	309	281	284	298	301	297	298	301	301	6 8	318	10 48	270
13	301	300	300	302	293	296	294	299	312	302	302	303	300	16 12	313	8 36	286
14	305	305	301	307	307	265	264	287	304	310	310	316	299	21 36	317	11 0	260
15†	316	315	314	323	317	305	293	313	329	320	321	323	316	15 20	330	11 40	289
16	323	323	323	330	327	299	302	304	314	313	315	318	316	7 20	332	9 40	298
17	321	318	317	325	316	317	308	320	327	325	323	328	321	22 54	330	11 32	303
18	329	330	330	332	315	294	286	304	313	314	309	311	313	5 56	333	11 8	283
19	312	312	314	322	306	292	297	310	312	311	310	312	309	5 50	322	10 8	291
20	315	313	311	317	311	281	277	284	287	293	291	291	297	6 20	318	11 0	270
21	300	299	298	301	303	303	281	290	303	301	297	298	298	7 30	303	11 24	277
22	303	303	302	309	292	273	271	305	313	308	308	312	301	22 8	314	11 36	268
23	316	319	320	331	321	305	287	305	322	321	323	323	316	6 4	333	11 40	284
24†	331	328	328	335	321	297	281	297	310	314	309	309	313	5 52	336	11 48	278
25†	310	307	309	318	309	294	286	301	311	306	305	306	305	5 50	318	11 0	280
26	307	306	306	312	308	280	277	290	296	292	290	292	296	6 36	314	10 40	275
27	291	289	288	295	286	270	273	272	293	291	288	289	285	6 10	297	10 30	265
28	291	291	290	297	288	263	277	293	304	303	304	309	294	23 26	311	9 20	261
29	313	312	308	321	304	301	300	315	326	327	327	329	316	23 12	333	10 40	292
30	332	334	329	336	331	279	277	282	301	311	312	314	311	6 22	340	11 0	275
Mean.	311	311	310	316	308	289	285	299	309	308	308	310	305				
Mean.†	318	315	316	322	313	295	288	304	317	313	312	313	310				

* See foot-note on page 60

† Five international quiet days.

JULY. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours.												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	313	313	308	315	301	298	300	300	313	318	317	323	310	21 40	324	10 0	293
2	323	323	324	329	318	292	294	307	320	309	310	313	314	6 10	330	11 8	291
3	314	314	313	317	312	308	303	323	334	330	320	323	318	16 36	335	9 18	292
4	324	324	325	330	315	280	270	292	306	297	298	301	304	6 8	331	11 40	269
5	313	313	315	321	307	297	304	317	325	320	317	320	313	16 0	326	10 24	290
6	321	322	319	323	321	294	288	301	299	296	301	301	306	5 50	323	10 46	279
7	304	306	306	307	297	302	301	307	310	302	302	303	304	15 36	312	8 40	292
8†	312	313	310	318	310	288	286	290	304	303	297	299	301	6 12	320	10 56	278
9	302	301	301	305	314	308	288	298	312	311	307	311	305	7 50	314	12 10	283
10	314	314	312	322	311	275	255	285	300	305	300	305	299	6 12	324	11 28	252
11†	306	305	304	309	307	305	286	301	300	303	301	304	303	6 28	311	11 56	283
12†	313	309	309	318	308	283	275	284	299	304	306	310	301	5 48	318	11 0	271
13	312	312	310	316	320	317	287	287	305	318	315	320	310	7 16	323	14 24	282
14	322	322	320	329	326	291	292	300	299	303	308	311	310	6 44	333	10 48	286
15	307	308	303	308	317	314	286	299	310	307	307	309	306	7 16	319	12 0	283
16	309	309	309	314	308	278	283	286	297	295	295	298	299	5 42	314	10 16	276
17	295	299	295	303	290	284	275	295	299	296	294	296	293	5 36	304	11 0	267
18	297	295	294	303	296	275	267	274	299	301	300	303	293	5 20	303	11 10	267
19	304	304	305	311	311	296	293	303	298	303	300	304	303	6 48	316	11 28	289
20	308	308	308	309	308	298	292	298	305	303	301	302	303	6 50	311	12 20	278
21†	304	303	303	305	300	299	286	305	312	307	301	300	302	15 50	313	12 0	285
22†	301	300	299	304	294	257	267	285	289	287	287	289	289	5 50	304	10 8	252
23	289	289	289	297	291	287	289	298	302	284	288	289	291	15 20	303	11 12	281
24	290	292	292	298	299	281	288	281	283	281	281	282	287	7 0	301	10 20	276
25	285	285	285	285	277	264	277	287	299	287	283	285	283	15 44	299	10 20	260
26	287	287	291	295	274	269	271	288	296	290	290	296	287	20 40	301	9 8	266
27	296	302	301	302	293	297	294	304	298	287	297	298	297	13 36	309	10 28	287
28	301	303	301	305	295	284	270	282	300	292	292	294	293	7 8	308	11 40	265
29	305	302	303	304	290	286	284	299	304	299	295	301	297	6 0	306	11 32	282
30	303	301	302	308	297	272	276	290	302	297	289	295	294	5 50	308	11 16	266
31	299	300	299	302	292	281	282	294	301	297	291	294	294	6 4	304	10 4	276
Mean.	306	306	305	310	303	289	284	295	304	301	300	303	300				
Mean.†	307	306	305	311	304	286	280	293	301	301	298	300	299				

AUGUST. 17000 γ PLUS TABULAR QUANTITIES.

1	298	300	301	303	293	285	286	295	290	294	293	299	295	5 50	303	11 0	281
2†	308	308	310	313	303	291	289	299	298	296	297	299	301	5 48	313	12 12	234
3†	305	305	304	307	304	292	294	298	295	292	297	301	299	5 48	307	16 44	288
4	304	306	308	311	297	286	290	300	309	303	300	303	301	5 50	311	9 44	286
5	303	307	308	315	299	299	301	315	317	309	307	309	308	15 0	320	10 44	297
6	309	310	311	315	301	291	300	309	311	307	306	310	306	5 46	316	9 24	289
7	308	306	307	314	290	296	283	296	307	299	302	304	301	5 50	315	11 24	280
8	301	300	301	308	294	280	279	303	308	296	296	299	297	15 16	313	11 20	275
9	293	293	292	301	280	277	286	297	302	294	292	296	292	15 0	305	9 32	273
10	295	294	293	300	296	286	289	288	308	296	290	292	294	15 50	308	9 16	280
11	292	292	292	301	287	275	289	311	321	335	338	343	309	21 32	344	9 36	275
12	336	341	341	351	332	321	330	349	357	350	351	350	342	16 32	361	10 20	313
13	346	348	351	358	339	307	311	333	333	328	330	331	333	5 50	358	10 14	305
14	328	327	325	335	322	308	312	322	335	329	327	333	325	6 4	336	10 44	305
15	329	330	329	337	323	297	299	314	328	330	322	323	322	5 50	337	9 48	296
16	321	321	321	331	320	296	295	310	314	316	319	321	316	6 0	333	10 28	290
17†	318	318	318	320	320	297	300	316	327	312	312	315	315	15 20	329	10 40	291
18†	312	312	315	322	310	295	301	306	322	316	313	314	312	16 0	325	10 12	292
19	318	320	320	331	305	286	299	321	323	310	313	314	322	5 56	332	10 8	285
20	315	315	315	324	311	296	305	321	329	318	318	320	315	15 8	334	9 28	287
21	320	321	321	329	317	281	277	308	323	304	314	313	310	6 0	331	10 28	276
22	313	311	312	322	308	301	305	314	324	320	321	324	315	23 20	327	9 22	294
23	328	326	326	334	317	279	271	305	321	313	316	315	312	5 50	334	11 24	260
24	320	321	317	325	317	302	308	321	333	323	324	325	320	16 0	334	10 4	297
25	330	328	327	335	328	291	302	314	321	315	319	320	319	6 28	341	10 40	282
26	323	323	321	327	320	296	304	327	332	318	321	323	320	14 40	334	9 58	287
27	321	324	325	323	323	307	305	318	326	326	323	325	321	6 56	332	11 6	303
28†	324	322	322	331	309	275	280	303	315	309	309	309	309	6 20	333	10 32	269
29	311	308	310	320	294	278	284	304	314	301	304	304	303	5 28	320	10 48	273
30	304	300	300	307	305	290	287	305	319	308	307	308	304	16 20	321	10 20	285
31	309	308	311	317	301	261	280	322	337	322	322	326	320	15 0	337	10 4	259
Mean.	314	314	315	322	309	291	295	311	319	313	313	315	312				
Mean.†	313	313	314	319	309	290	293	304	311	305	306	308	307				

* See foot-note on page 60.

† Five international quiet days.

SEPTEMBER. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours.												Mean*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	325	327	327	339	319	311	314	335	338	325	329	333	327	5 52	340	9 28	307
†2	330	331	332	338	321	298	319	342	346	325	328	330	327	14 48	351	10 20	293
3	332	331	330	340	322	313	321	341	348	332	335	336	331	15 44	349	9 12	311
4	335	335	337	343	326	292	305	315	315	317	321	323	322	6 10	346	9 56	291
5	318	320	319	320	318	288	294	316	318	316	316	318	314	6 40	325	10 30	283
6	317	317	315	321	312	292	293	307	321	318	319	320	313	6 40	327	10 20	289
7	323	321	322	329	318	293	297	325	331	323	325	323	319	6 (	333	10 48	291
8	325	327	331	337	316	292	294	323	330	325	329	325	322	5 56	341	10 32	286
9	326	324	331	330	312	305	310	318	331	329	326	329	323	16 14	339	10 52	301
10	326	326	328	331	319	296	311	318	324	322	318	321	321	6 16	337	9 48	295
11	322	323	321	330	315	292	299	315	318	311	313	314	315	6 0	333	10 8	291
12	315	312	312	318	302	256	287	313	316	311	312	317	306	23 0	322	10 8	255
13	317	318	317	323	313	292	299	317	320	315	318	321	314	6 20	329	10 50	287
14	321	321	321	324	332	311	304	314	321	323	331	324	321	7 20	335	11 20	304
15	327	328	334	332	321	304	302	318	323	319	320	324	321	3 48	334	11 28	299
16	322	321	326	326	318	295	290	315	315	313	316	317	315	6 30	331	11 16	289
17	316	317	316	317	312	297	299	314	312	308	312	313	311	6 40	320	11 12	295
18	311	311	309	311	301	293	298	310	318	307	309	307	307	15 44	318	9 50	293
19	305	305	305	307	302	279	282	296	305	296	300	304	299	6 46	312	12 12	278
20	302	303	304	302	300	291	289	300	309	304	310	313	302	23 40	317	11 40	285
21	316	316	316	321	305	300	308	323	323	317	318	321	315	15 6	325	8 32	294
†22	321	322	322	326	316	289	293	317	320	313	316	316	314	6 32	332	10 40	279
†23	317	315	314	317	313	295	293	315	316	317	319	325	314	23 20	326	11 44	293
†24	327	325	323	325	321	309	306	319	320	320	321	321	319	6 28	328	11 0	303
25	325	325	321	323	323	306	310	323	321	321	321	324	320	6 48	331	10 40	300
†26	332	332	330	332	330	308	313	332	330	325	325	329	327	6 40	339	11 16	306
27	335	333	332	337	342	325	310	330	329	331	333	337	331	7 10	345	11 24	306
28	340	343	340	337	331	316	306	316	326	329	329	329	328	2 12	346	12 30	303
29	333	334	333	331	322	312	314	329	331	329	332	333	328	0 16	338	9 22	312
30	335	332	330	336	333	303	299	319	324	321	321	323	322	6 20	338	10 28	299
Mean.	323	323	323	327	318	298	302	319	323	319	321	322	318				
Mean†	325	325	324	328	320	300	305	325	326	320	322	324	320				

OCTOBER. 17000 γ PLUS TABULAR QUANTITIES.

†1	326	324	322	326	327	302	291	329	327	318	319	319	318	7	0	334	11	0	289
2	316	317	314	317	309	291	279	301	305	300	303	301	303	6	8	319	11	20	279
3	301	301	300	307	301	282	288	307	308	300	301	302	299	14	32	314	10	8	281
4	303	302	303	302	294	275	286	323	325	315	317	318	306	15	20	328	9	40	274
5	319	321	323	330	323	306	311	332	336	326	339	329	326	18	52	343	9	40	305
6	337	330	337	339	324	305	311	333	332	328	337	328	328	5	20	339	10	4	302
7	327	328	330	338	325	300	299	329	334	327	329	329	325	6	20	341	11	0	296
8	327	324	323	329	318	308	309	328	335	330	329	331	324	15	52	338	10	48	301
9	331	325	329	328	323	300	301	323	325	319	321	323	321	0	32	335	10	40	296
10	317	316	319	316	320	298	296	305	314	312	312	314	312	7	20	324	12	24	295
11	314	313	310	312	318	301	304	312	317	310	309	309	311	7	24	323	9	26	299
12	309	309	307	312	318	288	300	318	324	313	317	319	312	15	0	327	9	40	287
13	322	325	325	325	330	311	305	325	328	322	321	331	323	7	0	335	11	30	301
14	327	328	329	333	330	310	310	324	330	328	330	330	325	6	28	337	10	28	306
15	329	331	329	333	326	305	312	328	328	327	331	329	326	6	28	337	9	32	304
†16	334	331	333	337	339	325	317	331	330	329	331	332	330	7	44	339	11	0	317
17	330	329	330	335	335	319	319	325	337	327	329	331	329	6	40	339	10	40	313
†18	328	325	326	325	333	306	312	321	323	318	321	322	322	7	30	338	9	52	305
†19	323	322	323	325	329	311	311	327	329	325	328	329	324	7	20	333	11	0	307
20	328	325	324	325	327	298	302	325	328	322	325	328	322	8	12	333	11	6	288
21	328	327	325	325	328	312	313	331	333	327	330	332	325	14	40	338	10	20	305
†22	330	328	327	329	333	308	314	329	329	323	325	325	325	7	20	333	10	40	303
23	325	325	325	327	332	302	302	313	325	323	324	327	321	7	20	334	10	40	288
24	327	326	324	326	330	317	315	322	328	324	326	326	324	22	40	333	10	40	313
25	328	327	326	326	328	324	316	326	333	330	330	330	327	14	44	338	11	0	313
26	330	330	328	328	331	312	319	328	329	328	329	328	327	8	0	332	10	20	310
27	330	328	328	324	327	306	314	330	324	326	326	326	324	14	0	331	10	20	304
28	330	329	329	329	327	321	334	346	338	334	334	332	331	14	0	347	9	50	321
29	333	331	332	331	335	322	326	331	331	327	330	328	330	7	20	342	10	24	317
30	328	327	325	326	323	303	308	317	316	315	315	313	317	0	0	328	10	20	298
31	312	310	305	307	318	299	300	310	314	306	312	309	309	8	0	319	10	48	297
Mean.	324	323	323	325	325	305	307	324	326	321	324	324	321						
Mean†	328	326	326	328	332	311	309	327	328	323	325	325	324						

* See foot-note on page 60.

† Five international quiet days.

NOVEMBER. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours.												Mean*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	313	313	310	316	316	287	293	308	314	305	306	308	307	7 28	319	10 8	280
2	311	309	309	309	320	307	309	312	318	322	324	324	315	22 44	327	10 28	302
3	324	326	324	331	335	315	311	317	326	327	326	329	325	8 20	337	10 40	304
4	334	335	335	336	345	343	337	343	341	336	339	338	339	7 50	345	0 0	334
5	346	343	341	341	347	348	343	346	345	340	343	343	343	9 28	349	17 0	339
†6	346	343	342	342	343	338	329	334	336	329	331	331	336	9 21	347	11 0	324
†7	338	335	334	332	339	333	325	325	316	317	315	315	326	8 8	344	16 40	312
8	330	327	327	323	323	327	319	325	325	319	323	325	324	0 4	331	10 40	317
9	329	329	324	323	324	316	308	320	318	313	312	314	318	0 4	333	11 20	307
10	317	315	312	314	314	317	311	316	308	311	311	311	313	13 0	319	15 51	308
11	314	313	312	310	312	305	309	314	311	310	307	309	310	13 20	315	9 56	304
12	308	307	307	306	307	304	316	316	313	308	307	310	309	12 20	322	9 0	299
†13	305	305	304	304	309	298	296	299	300	298	300	300	301	8 0	310	12 40	293
14	297	297	301	302	302	306	303	309	312	311	309	309	305	13 20	315	0 0	296
15	301	301	299	299	305	310	314	312	321	331	334	335	315	23 10	337	6 20	298
16	334	334	333	332	336	337	341	337	339	341	341	341	337	11 44	342	5 0	332
17	338	336	335	334	349	342	340	343	342	341	342	340	340	7 52	353	5 48	329
†18	331	329	328	329	333	337	337	343	339	337	337	337	335	13 20	345	6 16	325
19	334	330	330	330	334	330	338	345	338	334	336	337	335	13 48	345	9 32	329
20	333	331	328	330	332	331	333	339	341	337	338	338	335	13 32	344	3 50	328
21	335	333	332	329	333	317	321	319	325	325	323	323	326	9 16	336	10 24	312
22	327	326	322	320	322	328	333	330	320	320	318	316	323	12 0	336	23 40	314
23	316	310	309	307	312	322	328	337	335	332	329	328	322	13 0	338	6 8	305
24	330	328	326	324	324	318	324	335	332	323	319	318	327	13 49	333	9 32	317
25	323	323	321	319	322	319	313	317	313	314	315	313	317	8 20	324	11 24	311
†26	312	311	311	308	312	308	311	313	312	312	311	311	311	13 20	319	10 16	305
27	310	307	308	310	311	309	306	312	308	304	304	304	308	9 16	315	18 4	303
28	299	294	293	295	297	298	301	302	299	300	300	300	299	13 0	305	2 56	293
29	295	294	292	290	298	296	307	301	307	307	305	307	301	23 6	310	3 2	290
30	302	304	303	306	308	322	326	329	322	321	322	325	317	13 16	332	0 8	301
Mean.	321	320	318	318	322	319	319	323	323	321	321	321	320				
Mean†	326	325	324	323	327	323	320	323	321	319	319	319	322				

DECEMBER. 17000 γ PLUS TABULAR QUANTITIES.

1	322	320	322	322	322	314	331	339	329	327	327	326	326	13 10	343	10 0	313
2	320	319	318	319	324	330	328	336	329	326	327	330	326	13 16	341	6 52	315
†3	327	326	327	329	331	330	336	329	324	329	330	330	329	11 4	339	16 2	323
4	329	327	328	331	330	337	339	350	333	331	331	331	333	13 32	352	6 20	326
5	327	327	326	327	327	325	329	335	325	320	321	322	325	13 24	338	16 40	315
6	322	319	319	321	319	317	323	327	325	328	327	328	323	17 58	330	10 40	316
7	329	327	324	322	323	324	329	331	320	317	318	319	319	12 32	334	16 40	315
†8	321	321	322	323	322	322	331	339	333	330	330	331	327	14 20	341	9 17	320
9	335	330	330	328	323	317	323	333	332	326	328	328	328	14 12	336	9 50	317
10	328	328	326	325	327	328	326	336	334	331	331	330	330	13 30	337	2 47	317
11	328	326	327	325	329	317	317	326	324	317	319	317	322	0 40	330	9 50	317
12	320	320	317	319	324	322	313	320	323	320	320	321	320	14 24	326	13 6	309
13	322	321	321	320	320	317	311	323	318	317	317	317	318	14 6	324	11 48	311
14	316	315	314	316	321	317	308	325	325	320	324	324	319	13 48	327	11 44	307
15	326	321	324	328	332	330	337	344	345	337	337	334	333	16 4	347	0 16	320
†16	331	333	335	336	335	335	325	339	343	340	339	337	336	16 0	345	12 0	322
17	335	334	334	334	335	330	340	336	341	335	335	333	335	15 0	343	10 16	328
18	332	330	331	337	333	329	333	338	333	334	333	333	333	13 8	339	10 16	328
19	333	332	334	335	339	324	326	334	336	331	331	330	332	7 50	339	10 28	320
20	329	329	329	329	333	336	330	336	339	330	329	329	331	15 48	339	6 40	328
21	331	328	327	329	329	312	310	318	325	317	317	318	322	0 0	334	12 0	309
†22	320	319	318	318	315	315	302	313	328	321	320	319	317	15 48	328	12 32	301
†23	321	321	320	321	325	317	300	310	320	315	316	317	317	9 4	328	11 12	295
24	320	320	323	327	330	327	336	333	337	338	335	332	330	17 0	340	0 20	318
25	331	330	328	330	334	328	328	330	337	333	333	328	331	15 40	338	20 44	327
26	324	324	324	327	330	332	328	332	334	336	332	334	330	18 12	341	3 8	321
27	329	330	327	327	331	333	322	321	327	326	324	319	326	9 50	333	12 32	316
28	320	320	320	321	325	337	331	312	321	327	327	327	324	10 28	340	14 28	310
29	326	324	323	322	327	330	329	311	322	328	325	322	324	8 40	335	13 32	311
30	321	321	321	323	327	337	331	316	336	330	331	330	327	10 24	340	13 8	311
31	327	324	323	324	326	328	329	332	329	325	324	321	326	13 20	335	21 50	321
Mean.	326	325	325	326	327	326	325	329	330	327	327	326	326				
Mean†	324	324	324	325	326	324	319	326	330	327	327	327	325				

* See foot-note on page 60.

† Five international quiet days.

At Colaba, a day is classed either as (1) a quiet day, or a day of (2) small, (3) moderate, (4) great or (5) very great disturbance according to the degree of disturbance; the letters for distinguishing each class being C, S, M, G and VG respectively. For representing intermediate conditions of activity of the smaller period movements sub-classifications Ca, Sa and Ma are used. Roughly speaking a storm having a range over 225 γ during the first twenty-four hours is classed as 'Very great'. It is great if the range is between 150 γ and 225 γ, moderate if the range is between 65 γ and 150 γ and small if the range is less than 65 γ. During the year there was no storm, which could be classed as 'very great' like the one of May 12 to 17 of the last year. The following table gives a list of principal disturbances recorded during the year.

PRINCIPAL MAGNETIC DISTURBANCES, 1922.

Date.	Bombay civil time of beginning.	Duration in hours.	Maximum.		Minimum.		Range.	Relative Magnitude.	Remarks.
			Time.	Magnitude.	Time.	Magnitude.			
	H. M.		D. H. M.	γ	D. H. M.	γ	γ		
January 24	8 0	41	24 15 44	37,020	24 22 48	36,868	152	G	Commencement gradual.
" 31	4 24	27	31 10 14	37,018	31 20 18	36,852	166	G	Commencement sudden.
February 3	13 51	38	3 14 50	37,044	3 23 40	36,919	125	Ma	Do.
" 14	19 0	53	15 1 6	36,980	15 15 0	36,896	84	M	Commencement gradual.
March 5	8 0	21	5 11 30	37,046	5 22 36	36,855	191	G	Do.
" 10	6 28	24	10 10 10	37,058	10 21 30	36,911	147	Ma	Commencement sudden.
" 12	0 0	54	12 10 54	37,037	12 17 40	36,924	113	M	Commencement gradual.
" 14	11 53	48	14 12 4	36,997	14 17 0	36,879	118	M	Commencement sudden.
" 25	8 0	21	25 10 4	37,051	25 16 24	36,911	140	Ma	Commencement gradual.
May 16	8 0	25	16 13 30	37,023	16 21 54	36,924	99	M	Do.
" 20	21 0	57	21 10 0	37,026	21 20 32	36,932	94	M	Do.
June 2	8 0	27	2 9 46	37,056	2 22 6	36,940	116	M	Do.
" 28	11 0	..	29 10 40	37,014	28 0 32	36,951	63	Sa	The disturbance lasts for 6 days.
July 26	9 0	129	26 12 0	37,013	26 23 22	36,886	127	Ma	Commencement gradual.
August 11	11 0	110	11 12 12	37,003	11 19 30	36,871	132	Ma	Do.
" 21	4 0	25	21 11 2	37,029	21 22 42	36,923	106	M	Do.
" 23	3 0	82	23 12 14	37,026	23 20 44	36,922	104	M	Do.
" 29	8 0	45	29 11 44	37,020	29 17 32	36,942	78	M	Do.
September 6	14 0	..	7 8 38	37,037	6 18 48	36,931	106	M	The disturbance lasts for 5 days.
" 14	8 0	26	14 8 50	36,961	14 18 0	36,798	163	G	Commencement gradual.
October 4	15 0	38	5 2 10	36,978	5 20 50	36,821	157	G	Commencement not well pronounced.
" 20	4 0	24	20 11 28	37,023	20 21 18	36,927	96	M	Commencement gradual.
November 29	8 36	21	29 10 4	37,001	29 18 8	36,903	98	M	Commencement sudden.
December 5	9 0	41	5 11 6	37,044	5 23 6	36,964	80	M	Commencement gradual.
" 26	6 0	24	26 8 33	37,010	26 19 48	36,918	92	M	Do.

$\phi = 18° 53' 36'' N$; $\lambda = 72° 48' 56'' E$; $h = 11$ *meters. Subsoil—Trap.*

Apparatus.—Omori-Ewing Horizontal Pendulum Seismograph (E-W.).

	V	T	ϵ	$\frac{r}{To^2}$.
AE ..	20	32	....	....

Date.	Phase.	Time G. M. T. h. m. s.	Amplitude (μ) Ae	Remarks.
1922.				
Jan. 6th.	e	14 49 25†	..	Maximum cannot be determined as the movements are very small.
„ 9th.	eP	6 7 53	..	do. do.
	P	4 9 2	..	
	M	4 36 57	855	
„ 19th.	P	22 20 5†	..	Maximum cannot be determined as the movements are very small.
„ 31st.	eP	13 58 25	..	
	M	14 17 11	125	
Feb. 14th.	eP	13 3 51	..	Maximum cannot be determined as the movements are very small.
Mar. 4th.	P	13 18 45	..	do. do.
„ 12th.	P	18 0 59*	..	do. do.
„ 13th.	P	0 9 11	..	do. do.
April. 8th.	P	20 58 39†	..	do. do.
May 2nd.	P	11 20 19	..	
	S	11 25 3	..	
	M	11 27 46	30	
„ 4th.	P	9 33 15	..	
	eS	9 49 39	..	Maximum cannot be determined as the movements are very small.
„ 12th	Pe	18 51 6†	..	Movements very small.
June 2nd.	P	20 22 14	..	Maximum cannot be determined as the movements are very small.
July 2nd.	P	13 52 34	..	
	S	14 4 32	..	
	M	14 32 35	170	
„ 3rd.	P	5 40 3	..	Maximum cannot be determined as the movements are very small.
Aug. 13th.	P	0 17 15	..	Maximum cannot be determined as the movements are very small.
„ 16th.	P	16 13 21*	..	do. do.
„ 25th.	Pe	19 33 56*	..	do. do.
„ 29th.	P	17 16 36*	..	do do.
Sept. 1st.	P	19 24 22*	..	
	S	19 31 6	..	
	L	19 40 23	..	
	M	19 42 51	..	
„ 8th	Pe	14 13 54†	..	Maximum cannot be determined as the movements are very small.
„ 14th.	Pe	19 40 46†	..	
	L	19 56 47	..	
	M	19 59 37	..	
„ 16th.	Pe	22 56 2†	..	
	L	23 3 17	..	
	M	23 12 49	..	
„ 17th.	Pe	7 41 29†	..	Maximum cannot be determined as the movements are very small.
„ „	Pe	10 14 23†	..	do. do.
Oct. 11th	P	15 10 11†	..	do. do.
„ 14th.	Pe	23 58 20*	..	do. do.
„ 16th.	P	16 3 55*	..	do. do.
„ 24th	P	21 33 6*	..	
	S	21 42 9	..	
	L	21 57 44	..	
	M	22 3 52	..	
Nov. 8th	Pe	0 11 33*	..	Movements are very small.
„ 11th.	P	4 52 27†	..	
	S	5 9 48	..	
	L	5 47 19	..	
	M	5 51 9	..	
Dec. 6th	P	13 59 31*	..	Maximum cannot be determined as the movements are very small.
„ 17th.	P	0 55 31	..	do. do.
„ 31st.	P	7 40 4	..	do. do.

* From Colaba No. 1 (E-W) Seismograph as the Omori-Ewing instrument was not working.

† „ „ „ 2 (N-S) „ „ „ „ „ „

Fourier analysis of diurnal and annual variations of the horizontal force for the five international quiet days during 1922.

Diurnal variation: $\Delta H = c_1 \sin(\theta + \phi_1) + c_2 \sin(2\theta + \phi_2) + \ldots\ldots$; θ is counted at the rate of 15° per hour from midnight to midnight (G. M. T).

Annual variation: $\Delta H = c_1 \sin(\theta + \phi_1) + c_2 \sin(2\theta + \phi_2) + \ldots\ldots$; θ is counted at the rate of 30° per average month.

Quantity.	Diurnal variation.												Annual variation.
	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
c_1	8·51	12·13	16·38	18·36	15·40	13·66	12·91	6·72	5·99	13·09	14·52	8·28	10·16
c_2	5·24	7·59	9·83	10·66	8·04	10·13	7·95	5·08	6·12	6·54	8·05	5·73	7·12
c_3	1·85	4·19	6·28	5·65	3·53	3·47	3·21	2·83	3·73	3·77	3·68	2·23	5·27
c_4	0·56	0·39	1·64	2·54	1·04	0·99	0·54	0·75	1·72	1·78	1·23	0·74	1·71
c_1/c_2	1·6	1·6	1·7	1·7	1·9	1·3	1·6	1·3	1·0	2·0	1·8	1·4	1·6
	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′
ϕ_1	338 55	9 55	353 22	347 21	349 34	349 23	344 44	320 27	339 29	346 40	356 46	357 30	119 37
ϕ_2	242 7	236 30	240 26	252 42	255 13	238 14	239 16	222 56	218 50	236 48	252 52	253 28	35 51
ϕ_3	139 50	164 46	157 9	172 58	179 31	139 20	149 32	177 34	142 51	159 1	177 21	159 47	208 4
ϕ_4	337 4	199 22	41 47	114 9	94 24	270 35	32 14	75 25	117 1	26 25	91 24	46 6	77 11

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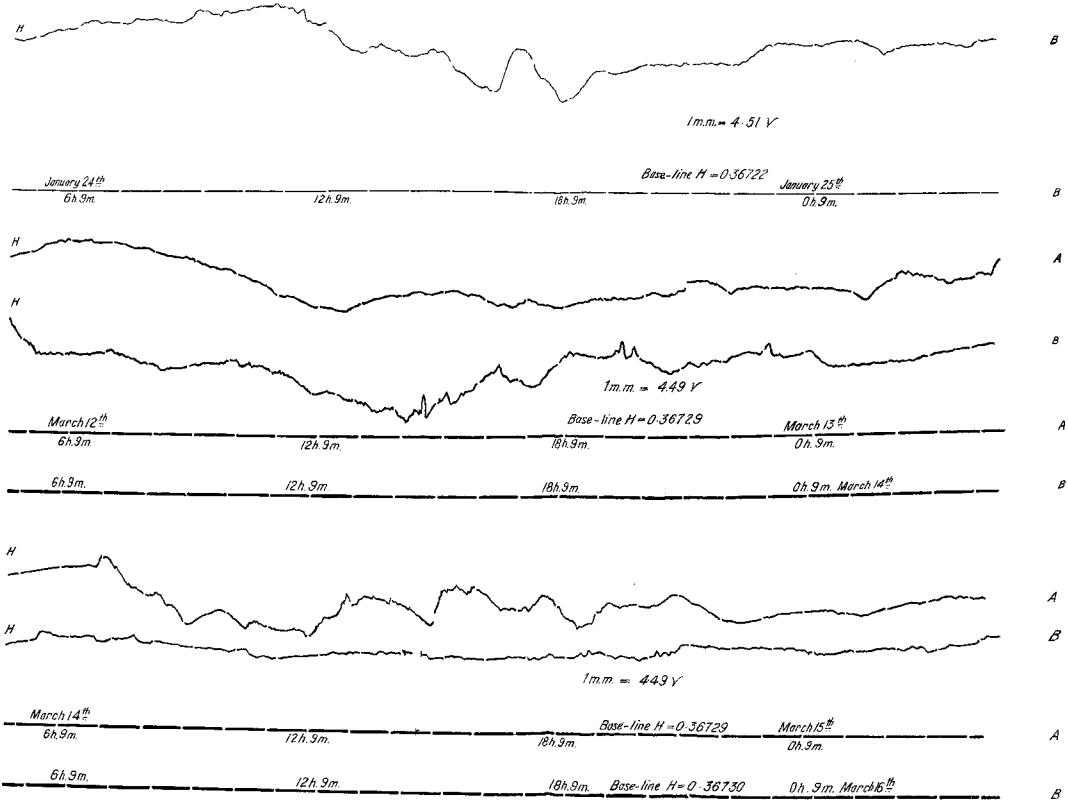
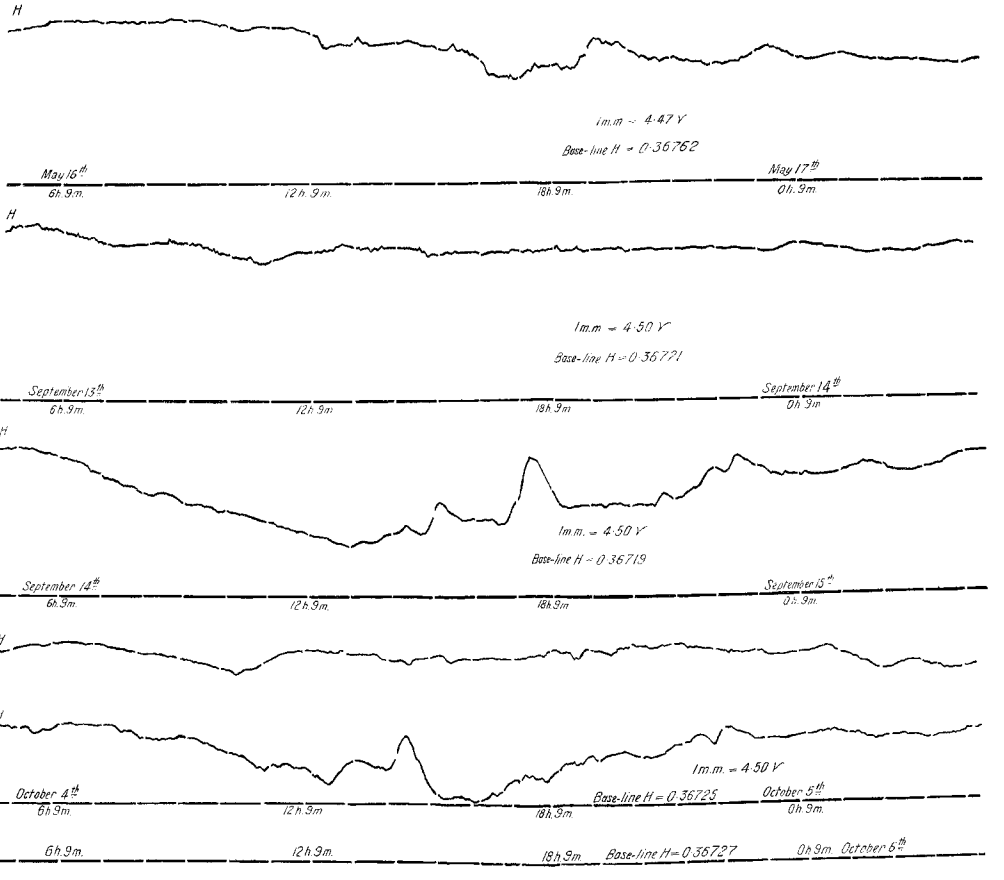
ALIBAG OBSERVATORY MAGNETOGRAMS, 1922.

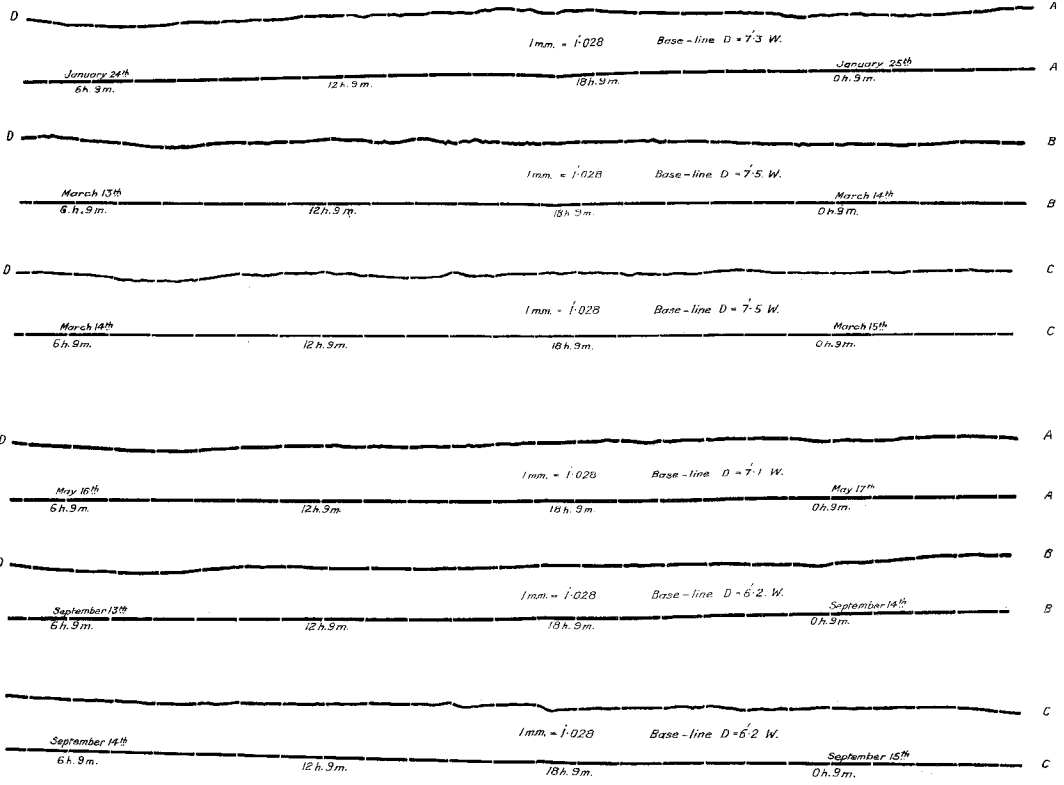
Plate I.



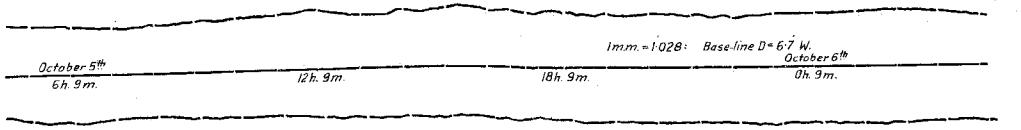
ALIBAG OBSERVATORY MAGNETOGRAMS, 1922.



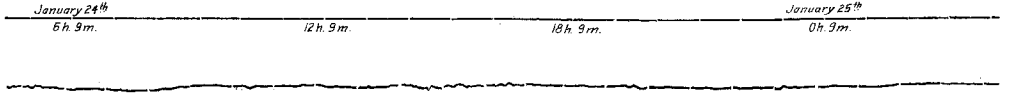
ALIBAG OBSERVATORY MAGNETOGRAMS, 1922.



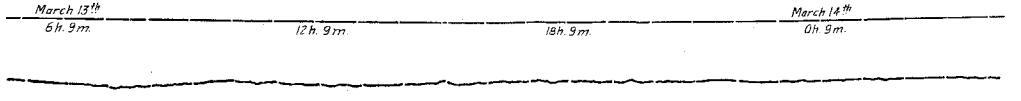
ALIBAG OBSERVATORY MAGNETOGRAMS, 1922.



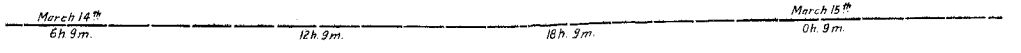
1m.m. = 9·53 V
Base-line V = 0·16660

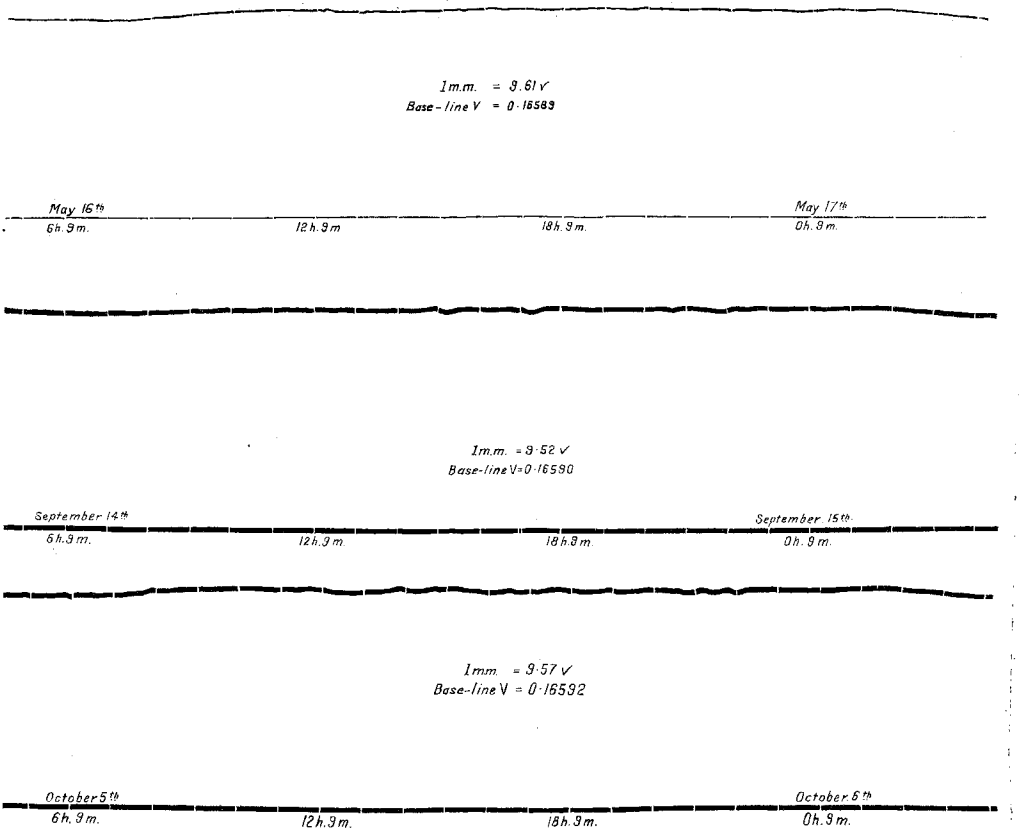


1m.m. = 9·54 V
Base-line V = 0·16652



1m.m. = 9·54 V
Base-line V = 0·16654




B
1m.m. = 9.61 V
Base-line V = 0·16583
May 16th
6h. 9m.
12h. 9m
18h. 9m.
May 17th
0h. 9m.
B
A
1m.m. = 9·52 V
Base-line V=0·16590
September 14th
6h. 9m.
12h. 9m.
18h. 9m.
September 15th
0h. 9m.
A
B
1m.m. = 9·57 V
Base-line V = 0·16592
October 5th
6h. 9m.
12h. 9m.
18h. 9m.
October 6th
0h. 9m.
B

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